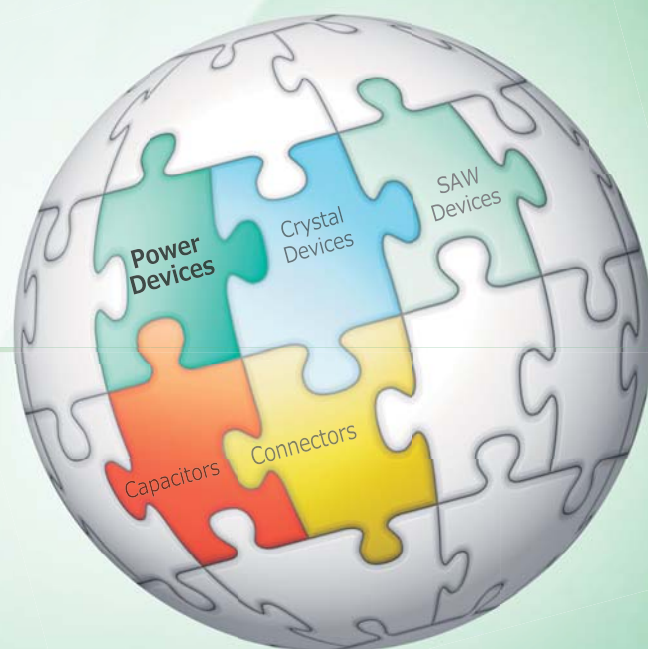


THE NEW VALUE FRONTIER



Power Devices

2018



京セラ株式会社
KYOCERA Corporation

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1. 記号と用語 Symbols and Terms

1-1. ダイオード Diode

記号 Symbols	用語 Terms	定義 Definitions
VRRM	繰り返しピーク逆電圧	繰り返し印加できる逆電圧のピーク値
	Repetitive Peak Reverse Voltage	Allowable peak reverse voltage repetitively applicable to diode
VRSM	非繰り返しピーク逆電圧	非繰り返しで印加できる逆電圧のピーク値
	Surge Peak Reverse Voltage	Allowable peak reverse voltage non-repetitively applicable to diode
IF(RMS)	実効順電流	連続して通電できる順電流の実効値
	RMS Forward Current	Maximum RMS value of continuous forward current
Io	平均整流電流	指定された条件で商用周波数（50Hz/60Hz）で流しうる最大平均電流
	Average rectified output current	Maximum average forward current of commercial frequency (50Hz/60Hz) sin wave under specified condition
IFSM	サージ順電流	50Hzまたは60Hzの正弦波1サイクルを非繰り返しで流しうる最大順電流のピーク値
	Surge forward current	Non-repetitive maximum peak forward current in one cycle of (50Hz/60Hz) sin wave
I ² t	電流 2 乗時間積	10ms 未満 1ms までの非繰り返しピーク順電流を計算するための値
	Current squared times	Value to estimate none-repetitive peak forward current for 1ms ≤ t < 10ms pulse width
IRM	ピーク逆電流	規定の逆電圧を印加したときに流れる逆電流のピーク値
	Peak reverse current	Peak reverse current at specified reverse voltage
VFM	ピーク順電圧	規定の順電流を流したときの順電圧ピーク値
	Peak Forward Voltage	Peak forward voltage at specifi
Tjw	動作接合温度範囲	動作時の接合温度保証範囲
	Operating Junction Temperature Range	Range of junction temperature while operating
Tstg	保存温度範囲	保存（非動作時）の周囲温度保証範囲
	Storage Temperature Range	Range of ambient temperature while not operating
Rth	熱抵抗	熱的平衡状態にあるときの接合部・周囲間、あるいは、接合部・ケース間のような2点間の単位損失あたりの温度差 Rth(j-c) : 接合・ケース間, Rth(j-l) : 接合・リード間, Rth(j-a) : 接合・周囲間
	Thermal Resistance	Temperature difference per watt between two points, such as junction and ambient, or junction and case after thermal balance is established Rth(j-c): junction to case, Rth(j-l): junction to lead, Rth(j-a): junction to ambient
trr	逆回復時間	順方向通電状態から逆方向にスイッチするときに、逆阻止能力を回復するまでの時間、図 1 参照
	Reverse Recovery Time	Time required to recover blocking capability after current is switched from forward to reverse. Refer to Fig 1.

1-2. サイリスタ Thyristor

記号 Symbols	用語 Terms	定義 Definitions
VRRM	繰り返しピーク逆電圧	アノード・カソード間に繰り返し印加できる逆電圧のピーク値
	Repetitive Peak Reverse Voltage	Allowable peak reverse voltage repetitively applicable between anode and cathode
VDRM	繰り返しピークオフ電圧	アノード・カソード間に繰り返し印加できるオフ電圧のピーク値
	Repetitive Peak Off-state Voltage	Allowable peak off-state voltage repetitively applicable between anode and cathode
Io	平均オン電流	指定された条件で商用周波数（50Hz/60Hz）で流しうる最大オン電流の平均値
	Average rectified output current	Maximum average on-state current of commercial frequency (50Hz/60Hz) half sin wave under specified condition
ITSM	サージオン電流	50Hz 正弦波 1 サイクルを非繰り返しで流しうる最大オン電流のピーク値
	Surge on-state current	Non-repetitive maximum peak on-state current in one cycle of 50Hz sin wave
IGT	トリガゲート電流	オンさせるのに必要な最小ゲート電流
	Gate trigger current	Minimum gate current required to turn on
VGT	トリガゲート電圧	オンさせるのに必要な最小ゲート電圧
	Gate trigger voltage	Minimum gate voltage required to turn on
Tjw	動作接合温度範囲	動作時の接合温度の範囲
	Operating Junction Temperature Range	Range of junction temperature while operating

1-3. MOSFET

記号 Symbols	用語 Terms	定義 Definitions
V _{DSS}	ドレイン・ソース間電圧	ゲート・ソース間を短絡したうえでドレイン・ソース間に印加できる電圧のピーク値
	Drain-Source Voltage	Allowable peak voltage between drain and source with gate short-circuited to source
I _D	ドレイン電流	連続して流せるドレイン電流の最大値
	Drain Current	Maximum allowable continuous value of drain current
P _D	全損失	ケース温度 25℃ での最大許容電力損失
	Power dissipation	Maximum allowable power dissipation at 25℃
T _{jw}	動作チャンネル温度範囲	動作時のチャンネル温度の範囲
	Operating channel Temperature Range	Range of channel temperature while operating
R _{DS(on)}	ドレイン・ソース間オン抵抗	規定のゲート電圧を印加して、規定のドレイン電流を流したときのドレイン・ソース間の直流抵抗
	Static Drain-Source On-resistance	DC resistance between drain and source at specified gate voltage and drain current
V _{DS(on)}	ドレイン・ソース間オン電圧	規定のゲート電圧を印加して、規定のドレイン電流を流したときのドレイン・ソース間のオン電圧
	Drain-Source On-Voltage	On-voltage between drain and source at specified gate voltage and drain current
I _S	ソース電流	連続して流せるソース電流の最大値
	Source Current	Maximum allowable current into source terminal
V _{SD}	ソース・ドレイン間電圧	ゲート・ソース間を短絡して、規定のソース電流を流したときのソース・ドレイン間電圧
	Source-Drain Voltage	Voltage between source and drain terminals at specified source current with gate short-circuited to source

1-4. IGBT

記号 Symbols	用語 Terms	定義 Definitions
V _{CES}	コレクタ・エミッタ間電圧	ゲート・エミッタ間を短絡したうえでコレクタ・エミッタ間に印加できる電圧のピーク値
	Collector-Emitter Voltage	Allowable peak voltage between collector and emitter with gate short-circuited to emitter
I _C	コレクタ電流	連続して流せるコレクタ電流の最大値
	Collector Current	Maximum allowable continuous value of collector current
V _{CE(sat)}	コレクタ・エミッタ間飽和電圧	規定のゲート電圧を印加して、規定のドレイン電流を流したときのコレクタ・エミッタ間電圧
	Collector-Emitter Saturation Voltage	Collector-Emitter saturation voltage at specified gate voltage and source current
t _{on}	ターンオン時間	図 2. 参照
	turn-on time	Refer to Fig 2.
t _{off}	ターンオフ時間	図 2. 参照
	turn-off time	Refer to Fig 2.

用語解説用波形

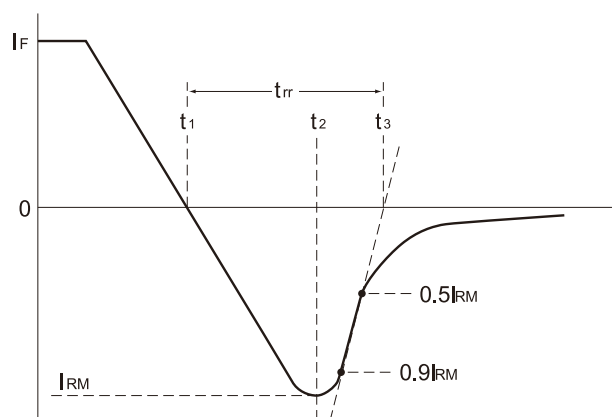


図 1. 逆回復波形
Fig 1. Recovery Waveforms

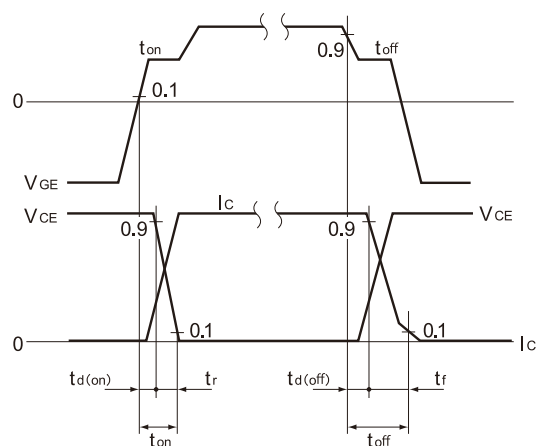


図 2. スイッチング時間波形
Fig 2. Switching Time Waveforms

2. 製品早見表 Quick Reference

2-1. ディスクリート製品 Discrete Products

2-1-1. 一般整流ダイオード Rectifier Diodes

Package	$V_{RRM}[V]$		400	600	900	Page
	$I_o[A]$					
SOD-123	0.5	EP05DA40				23
DO-214AC (SMA)	1.0	EC10DS4				23
		EC10DA40				23
3Max×ø2.7 (DO-41S)		10EDB40	10EDB60			23
DO-204AC (DO-15)	2.0	20CDA40	20CDA60			23
DO-201AD	3.0	30GDA40	30GDA60			23
nSMC		NSD03A40				23
TO-220 Full-Mold 2pin	20.0			FSD20A90		23

2-1-2. ファストリカバリダイオード（単体） Fast Recovery Diodes (Single chip)

Package	$V_{RRM}[V]$		200	300	400	600	Page
	$I_o[A]$						
SOD-123	0.4					EP04RA60	23
	0.5	EP05FA20					23
DO-214AC (SMA)	0.8					EC8FS6	23
	1.0	EC11FS2			EC11FS4		23
		EC10UA20					23
3Max× ø2.7 (DO-41S)		11EFS2			11EFS4		23
DO-204AC (DO-15)	2.0				20CFA40	20CFB60	23
TO-251	3.0				EA31FS4		23
TO-252 (Dpak)		EA31FS2-F			EA31FS4-F	ESF03B60-F	23
						ESF03F60-F	23
TO-220 Full-Mold 2pin						FSF03F60	24
DO-201AD		30GFA20			30GFA40	30GFB60	23
						30GFD60	23
DO-214AC (SMA)		EC30FA20			EC30FA40	EC30FH60	23
nSMC		NSF03A20			NSF03A40	NSF03B60	23
						NSF03E60	23
						NSU03A60	23
TO-277	5.0	VSF05A20					23
TO-252 (Dpak)						ESF05H60-F	23
TO-220 2pin		GSF05A20			GSF05A40	GSF05F60	24
TO-220 Full-Mold 2pin		FSF05A20			FSF05A40	FSF05F60	24
						FSF05H60	24
						FSF05HU60	24
		FSU05A20	FSU05A30	FSU05A40	FSU05D60		24
TO-220 Full-Mold		FSF05A20B			FSF05A40B	FSF05F60B	24
TO-252 (Dpak)	8.0					ESF08HU60B-F	23
TO-220 Full-Mold 2pin						FSF08F60	24
						FSF08H60	24
						FSU08D60	24
	10.0	FSF10A20			FSF10A40	FSF10F60	24
					FSF10H60	24	
					FSF10HU60	24	
					FSF10HU60V	24	
FSU10A20		FSU10A30	FSU10A40	FSU10D60		24	
					FSU10D60V	24	
TO-220 Full-Mold		FSF10A20B			FSF10A40B	FSF10F60B	24
TO-220 Full-Mold 2pin	15.0					FSF15F60	24
						FSF15H60	24
						FSU15D60	24
TO-247 2pin	30.0					KSF30F60	24
						KSF30H60	24
						KSU30D60	24
TO-247		KSF30A20B	KSU30A30B	KSF30A40B	KSF30F60B	24	
TO-247 2pin (long lead)						KSU30D60N	24
						KSF30F60N	24
TO-247	60.0					KSF60F60B	24
TO-247 2pin (long lead)						KSF60F60N	24
						KSF60H60N	24
						KSU60D60N	24

2. 製品早見表 Quick Reference

2-1-2. ファストリカバリダイオード（複合型） Fast Recovery Diodes (Multi chip)

Package	V _{RRM} [V]		200	300	400	600	Page
	I _o [A]						
TO-251	2.0	EA21FC2		EA21FC4		25	
TO-252 (Dpak)		EA21FC2-F		EA21FC4-F		25	
TO-277	6.0	VCF06A20				25	
TO-251		EA61FC2		EA61FC4		25	
TO-252 (Dpak)		EA61FC2-F		EA61FC4-F	ECF06B60-F	25	
					ECF06F60-F	25	
					ECU06B60-F	25	
TO-220		GCF06A20		GCF06A40	GCF06F60	25	
TO-220 Full-Mold		FCF06A20		FCF06A40	FCF06F60	25	
TO-220	10.0	GCF10A20		GCF10A40		25	
TO-220 Full-Mold		FCF10A20		FCF10A40	FCF10F60	25	
				FCF10A40V		25	
					FCF10H60	25	
		FCU10A20	FCU10A30	FCU10A40	FCU10A60	25	
					FCU10D60	25	
		FRF10A20		FRF10A40		25	
TO-262		TCF10A20-11A			TCF10F60-11A	25	
TO-263LP				UCF10B40		25	
TO-220 Full-Mold	16.0	FCF16A20		FCF16A40		25	
TO-247		KCF16A20		KCF16A40		25	
TO-220 Full-Mold	20.0				FCF20F60	25	
					FCF20G60	25	
					FCF20H60	25	
					FCF20H60V	25	
		FCU20A20	FCU20A30	FCU20A40	FCU20D60	25	
			FCU20D30	FCU20AU40		25	
TO-262		TCU20A20-11A	TCU20A30-11A	TCU20A40-11A	TCF20B60-11A	25	
TO-263LP		UCU20D30			25		
TO-247				KCF20F60	26		
		KCU20A20	KCU20A30	KCU20A40		26	
	25.0	KCF25A20		KCF25A40		26	
	30.0	KCU30A20	KCU30A30	KCU30A40		26	
TO-247 (long lead)				KCF30F60N	26		
	60.0				KCU60D60N	26	

2-1-3. ショットキーバリアダイオード（単体） Schottky Barrier Diodes (Single chip)

Package	$V_{RRM}[V]$ $I_o[A]$	30	35	40	45	60	65	Page
SOD-123	0.5	EP05Q03L		EP05Q04		EP05Q06		26
3Max× ø2.7 (DO-41S)	1.0	11EQS03L		11EQS04		11EQS06		26
SOD-323FL		SA10LA03						26
		SA10QA03		SA10QA04		SA10QA06		26
SOD-123		EP10LA03						26
		EP10QY03		EP10QY04				26
DO-214AC (SMA)		EC10LA03						26
		EC10QS03L		EC10QS04		EC10QS06		26
TO-252 (Dpak)	1.7			EA20QS04-F		EA20QS06-F		27
DO-204AC (DO-15)	2.0	20CQA03L		20CQA04		20CQA06		26
DO-214AC (SMA)		EC21QS03L		EC21QS04	EC20QSA045	EC21QS06	EC20QSA065	26
TO-251	3.0			EA30QS04				27
TO-252 (Dpak)		EA30QS03L-F		EA30QS04-F		EA30QS06-F		27
DO-201AD		30GQA03L		30GQA04		30GQA06		26
DO-214AC (SMA)		EC31QS03L		EC31QS04	EC30QSA045	EC31QS06	EC30QSA065	26
NA (DO-221BC)			NA03QSA035		NA03QSA045		NA03QSA065	27
					NA03QSAU045		NA03QSAU065	27
nSMC		NSQ03A03L		NSQ03A04		NSQ03A06		27
TO-220 2pin	5.0			GSQ05A04		GSQ05A06		27
TO-220 Full-Mold 2pin		FSQ05A03L			FSQS05A045		FSQS05A065	27
							FSQS05AU065	27
DO-201AD					50GQSA045		50GQSA065	26
NA (DO-221BC)			NA05QSA035		NA05QSA045		NA05QSA065	27
TO-277	10.0				VSQS10A045		VSQS10A065	27
TO-220 2pin				GSQ10A04		GSQ10A06		27
TO-220 Full-Mold 2pin					FSQS10A045		FSQS10A065	27
	15.0				FSQS15A045			27
					FSQS15A045V			27
TO-277					VSQS15A045			27
TO-247 2pin	30.0			KSQ15A04		KSQ15A06		27
TO-220 Full-Mold 2pin					FSQS30A045			27
TO-247 2pin				KSQ30A04		KSQ30A06		27

2. 製品早見表 Quick Reference

2-1-3. ショットキーバリアダイオード H シリーズ 〈低リーク品〉 (単体) Schottky Barrier Diodes H-Series <Low-IR type> (Single chip)

Package	$V_{RRM}[V]$		30	40	45	65
	$I_o[A]$					
SOD-123	0.5					
3Max× ø2.7 (DO-41S)	1.0					
SOD-123		EP10HY03				
DO-214AC (SMA)						
TO-251	1.7					
TO-252 (Dpak)	2.0					
DO-204AC (DO-15)						
DO-214AC (SMA)						
TO-252 (Dpak)	3.0					
DO-201AD						
DO-214AC (SMA)		EC30HA03L	EC30HA04			
NA (DO-221BC)				NA03HSA045	NA03HSA065	
nSMC		NSH03A03L	NSH03A04			
TO-277						
TO-220 Full-Mold 2pin	4.0					
TO-252 (Dpak)	5.0					
TO-220 2pin						
TO-220 Full-Mold 2pin		FSH05A03L				FSHS05A065
DO-201AD						
NA (DO-221BC)				NA05HSA045	NA05HSA065	
nSMC		NSH05A03				NSHS05A065
TO-277	10.0					
TO-220 2pin						
TO-220 Full-Mold 2pin		FSH10A03L				
TO-277	15.0					
TO-247 2pin	30.0					

	80	100	120	150	200	Page
		EP05H10				28
		11EQS10			10EHA20	28
						28
		EC10QS10				28
		EA20QS10				28
		EA20QS10-F				28
		20CHA10			20CHA20	28
		EC21QS10				28
		EA30QS10-F				28
		30GHA10			30GHA20	28
		EC31QS10				28
NA03HSA08			NA03HSA12	NA03HA15	NA03HA20	28
		NSH03A10		NSH03A15		28
			VSHS03A12			28
		FSH04A10	FSHS04A12			28
				ESH05A15-F		28
		GSH05A10				28
FSHS05A08		FSH05A10		FSH05A15	FSH05A20	28
50GHSA08			50GHSA12			28
NA05HSA08			NA05HSA12			28
						28
			VSHS10A12			28
		GSH10A10				28
		FSH10A10		FSH10A15		28
VSHS15A08			VSHS15A12			28
		KSH15A10				28
					KSH30A20	28

2. 製品早見表 Quick Reference

2-1-3. ショットキーバリアダイオード（複合） Schottky Barrier Diodes (Multi chip)

Package	$V_{RRM}[V]$ $I_o[A]$	30	35	40	45
TO-252 (Dpak)	2.0			EA20QC04-F	
TO-251	4.0			EA40QC04	
TO-252 (Dpak)				EA40QC04-F	
TO-251	6.0			EA60QC04	
		ECL06B03			
TO-252 (Dpak)		EA60QC03L-F		EA60QC04-F	
		ECL06B03-F			
NB			NB06QSA035		NB06QSA045
TO-220 Full-Mold	8.0	FCQ08A03L			
TO-252 (Dpak)	10.0		ECQS10A035-F		ECQS10A045-F
TO-220				GCQ10A04	
TO-220 Full-Mold		FCQ10A03L	FCQS10A035		FCQS10A045
					FCQS10AU045
					FCQS10AU045V
TO-263LP		UCQ10A03			
NB			NB10QSA035		NB10QSA045
TO-220	20.0			GCQ20A04	
TO-220 Full-Mold		FCQ20A03L			FCQS20A045
					FRQS20A045
TO-263LP		UCQ20B03			UCQS20A045
TO-247				KCQ20A04	
TO-220	30.0	GCQ30A03L		GCQ30A04	
TO-220 Full-Mold		FCQ30A03L			FCQS30A045
					FCQS30AU045
TO-262					
TO-263LP		UCQ30A03			UCQS30A045
TO-247		KCQ30A03L		KCQ30A04	
	60.0	KCQ60A03L		KCQ60A04	

60	65	Page
EA20QC06-F		29
		29
EA40QC06-F		29
EA60QC06		29
		29
EA60QC06-F		29
		29
	NB06QSA065	29
		29
		29
GCQ10A06		29
	FCQS10A065	29
		29
		29
	UCQS10A065	30
	NB10QSA065	29
GCQ20A06		29
	FCQS20A065	29
	FCQS20BU065	29
	FCQS20BU065V	29
	FRQS20A065	29
		30
KCQ20A06		29
GCQ30A06		29
	FCQS30A065	29
	FCQS30AU065	29
TCQ30A06-11A		30
		30
KCQ30A06		30
KCQ60A06		30

2. 製品早見表 Quick Reference

2-1-3. ショットキーバリアダイオードHシリーズ〈低リーク品〉(複合) Schottky Barrier Diodes H-Series <Low-IR type> (Multi chip)

Package	$V_{RRM}[V]$ $I_o [A]$	30	40	45	60	
TO-251	2.0					
TO-252 (Dpak)						
TO-251	4.0					
TO-252 (Dpak)						
TO-220 Full-Mold	5.0					
TO-251	6.0					
TO-252 (Dpak)						
TO-220 Full-Mold						
NB						
TO-220 Full-Mold	8.0					
TO-252 (Dpak)	10.0					
TO-220						
TO-220 Full-Mold		FCH10A03L		FCHS10A045		
TO-263LP						
NB						
TO-220	20.0					
TO-220 Full-Mold		FCH20A03L		FCHS20A045		
TO-262						
TO-263LP						
TO-247						
TO-220		30.0				
TO-220 Full-Mold			FCH30A03L		FCHS30A045	
TO-262						
TO-263LP						
TO-247					KCH30A06	
TO-220 Full-Mold	40.0					
TO-247	60.0	KCH60A03L	KCH60A04			

2-1-3. ショットキーバリアダイオードGシリーズ〈超低リーク品〉(複合) Schottky Barrier Diodes G-Series <Ultra-Low-IR type> (Multi chip)

Package	$V_{RRM}[V]$ $I_o[A]$	120	150	Page
TO-220 Full-Mold	10.0	FCGS10A12		32
		FCGS10AU12	FCG10AU15	32
	20.0	FCGS20A12		32
		FCGS20BU12	FCG20BU15	32
			FRG20BU15	32
		FCGS30AU12	FCG30AU15	32
	30.0		FCG30AU15V	32

65	80	100	120	150	200	Page
		EA20QC10				30
		EA20QC10-F				30
		EA40QC10				30
		EA40QC10-F				30
		FCH05A10				31
		EA60QC10				30
		EA60QC10-F			ECH06A20-F	30
		FCH06A10				31
NB06HSA065	NB06HSA08		NB06HSA12	NB06HA15	NB06HA20	30
		FCH08A10	FCCHS08A12	FCH08A15		31
				FRH08A15		31
	ECHS10A08-F					30
		GCH10A10				30
FCCHS10A065	FCCHS10A08	FCH10A10	FCCHS10A12	FCH10A15	FCH10A20	30/31
				FCH10A15V	FCH10A20V	31
		FCH10AU10V				31
		FCH10E10		FRH10A15	FRH10A20	31
UCHS10A065	UCHS10A08		UCHS10A12			31
NB10HSA065	NB10HSA08		NB10HSA12			31
		GCH20A10				30
FCCHS20A065	FCCHS20A08	FCH20A10	FCCHS20A12	FCH20A15	FCH20A20	30/31
		FCH20BU10		FCH20BU15	FCH20A20V	31
		FCH20E10		FCH20BU15V	FCH20AU20	31
		FCH20E10V			FCH20AU20V	31
		FCH20AU10V				31
		FRH20A10		FRH20A15	FRH20A20	31
				TCH20A15-11A		31
	UCHS20A08		UCHS20A12			31
		KCH20A10			KCH20A20	31
	GCHS30A08	GCH30A10				30
FCCHS30A065	FCCHS30A08	FCH30A10	FCCHS30A12	FCH30A15		30/31
	FCCHS30AU08	FCH30E10				30/31
		FCH30E10V				31
		FCH30AU10				31
				TCH30A15-11A		31
	UCHS30A08		UCHS30A12			31
		KCH30A10		KCH30A15	KCH30A20	31
		FCH40EU10				31
						31

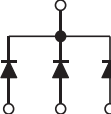
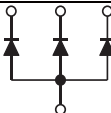
2-1-4. アバランシェ保証型ショットキーバリアダイオード Avalanche Guaranteed Schottky Barrier Diode

Package	$V_{RRM}[V]$ $I_o [A]$	90	Page
TO-263LP	30.0	UCHD30A09	32

2. 製品早見表 Quick Reference

2-1. モジュール製品 Module Products

2-2-1. 一般整流ダイオードモジュール (1/2) Rectifier Diode Modules(1/2)

Series	Circuit	$V_{RRM}[V]$ $I_o[A]$	800	1600	1800	Page
PH		150	PH1508			33
		250	PH2508			33
		400	PH400N8	PH400N16		33
PC		30	PC308	PC3016		33
		60	PC608	PC6016		33
		100	PC1008	PC10016		33
		150	PC1508	PC15016		33
		200	PC2008	PC20016		33
		250	PC2508	PC25016		33
		400	PC400N8	PC400N16		33
PD		30	PD308	PD3016		33
			PD30KN8	PD30KN16		33
		60	PD608	PD6016		33
			PD60KN8	PD60KN16		33
		100	PD100N8C	PD100N16		33
			PD100KN8	PD100KN16		33
				PD100MYN16	PD100MYN18	33/34
		150	PD1508	PD15016		33
			PD1518	PD15116		33
				PD15216		33
			PD150S8	PD150S16		33
			PD150KN8	PD150KN16		33
		200	PD2008	PD20016		33
			PD2018	PD20116		33
			PD200S8	PD200S16		33
			PD200KN8	PD200KN16		33
				PD200MYN16	PD200MYN18	33/34
		230	PD230S8	PD230S16		33
		250	PD2508	PD25016		33/34
			PD250KN8A	PD250KN16A		33/34
		260		PD260MYN16	PD260MYN18	34
		380		PD380MYN16	PD380MYN18	34
		400	PD400N8	PD400N16		33/34
		700		PD700MYN16	PD700MYN18	34
PR		250	PR250KN8N			34
PE		30	PE30SN8	PE30SN16		34
		100	PE1008N			34
			PE100SN8			34
PF		150	PE1508N			34
		30	PF30SN8	PF30SN16		34
			PF1008N			34
		100	PF100SN8			34

2-2-1. 一般整流ダイオードモジュール (2/2) Rectifier Diode Modules(2/2)

Series	Circuit	$V_{RRM}[V]$	800	1600	1800	Page
		$I_o[A]$				
PT		50	PT50SN8	PT50SN16		34
			PT50KN8	PT50KN16		34
		75	PT76SN8	PT76SN16		34
			PT75KN8	PT75KN16		34
		80		PT80MYN16	PT80MYN18	34
		100	PT100SN8	PT100SN16		34
			PT100KN8	PT100KN16		34
		150	PT151S8			34
			PT150KN8	PT150KN16		34
			PT150N8	PT150N16		34
				PT150MYN16	PT150MYN18	34
		200	PT200KN8	PT200KN16		34
			PT200N8	PT200N16		34
				PT200MYN16	PT200MYN18	34
		300	PT300S8	PT300S16		34

2-2-2. ファストリカバリダイオードモジュール Fast Recovery Diode Modules

Series	Circuit	$V_{RRM}[V]$	200	400	600	1200	Page
		$I_o[A]$					
PH-F		270	PH270F2				35
		300			PH300F6		35
PC-F		50	PC50F2	PC50F4			35
		100	PC100F2				35
		200			PC201FKN6		35
		300			PC300FN6		35
PD-F		50	PD50F2	PD50F4			35
		100	PD100F2				35
		200			PD201FKN6		35
P2H-F		30	P2H30F2	P2H30F4			35
		50				P2H50F12	35
		60	P2H60F2	P2H60F4			35
		80	P2H80F2	P2H80F4			35

2. 製品早見表 Quick Reference

2-2-3. ショットキーバリアダイオードモジュール Schottky Barrier Diode Modules

Package	Circuit	$V_{RRM}[V]$ $I_o[A]$	30	40	60	100	150	200	Page
PC-Q		60	PC60QL03N	PC60Q04N					35
		80	PC80QL03N	PC80Q04N					35
PE-Q		80	PE80QL03N						35
PQ-Q		160		PQ160QH04N	PQ160QH06N				35
P2H-Q		30				P2H30QH10	P2H30QH15	P2H30QH20	35
		60				P2H60QH10	P2H60QH15	P2H60QH20	35
		80				P2H80QH10	P2H80QH15	P2H80QH20	35

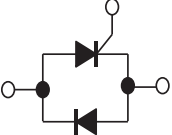
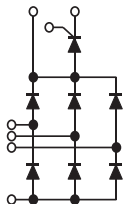
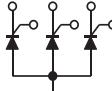
アバランシェ保証型ショットキーバリアダイオードモジュール Avalanche Guaranteed Schottky Barrier Diode Modules

Package	Circuit	$V_{RRM}[V]$ $I_o[A]$	90	120	Page
MR		80	MR80QZ09N	MR80QZ12N	35

2-2-4. サイリスタモジュール (1/2) Thyristor Modules(1/2)

Series	Circuit	$V_{DRM}[V]$ $I_o[A]$	400	600	800	1600	Page
PHT		30			PHT308C		36
		60			PHT608C		36
		250			PHT250N8	PHT250N16	36
		400			PHT400N8	PHT400N16	36
PDT		30			PDT308	PDT3016	36
		60			PDT608	PDT6016	36
		100			PDT1008	PDT10016	36
		150			PDT1508	PDT15016	36
					PDT1518	PDT15116	36
		200			PDT2008	PDT20016	36
					PDT2018	PDT20116	36
		250				PDT25016	36
PAT		400			PDT400N8	PDT400N16	36
						PDT400G16W	36
		30			PAT308	PAT3016	36
		60			PAT608	PAT6016	36
		100			PAT1008	PAT10016	36
		150			PAT1508	PAT15016	36
		200			PAT2008	PAT20016	36
		400			PAT400N8	PAT400N16	36

2-2-4. サイリスタモジュール (2/2) Thyristor Modules(2/2)

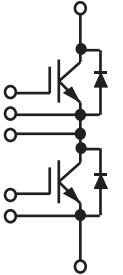
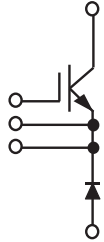
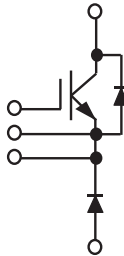
Series	Circuit	$V_{DRM}[V]$ $I_o [A]$	400	600	800	1600	Page
PAH		30			PAH308	PAH3016	36/37
					PAH30N8CM	PAH30N16CM	36/37
		60			PAH608	PAH6016	36/37
					PAH60N8CM	PAH60N16CM	36/37
					PAH60LN8	PAH60LN16	36/37
		100			PAH1008	PAH10016	36/37
					PAH100N8CM		36
					PAH100LN8	PAH100N16	36/37
		150			PAH1508	PAH15016	36/37
						PAH150N16	37
		200			PAH2008	PAH20016	36/37
					PAH200N8		36
PCH		30			PCH308	PCH3016	37
		60			PCH608	PCH6016	37
		100			PCH1008		37
		150			PCH1508	PCH15016	37
		200			PCH2008	PCH20016	37
		400			PCH400N8		37
PDH		30			PDH308	PDH3016	37
		60			PDH608	PDH6016	37
		100			PDH1008	PDH10016	37
		150			PDH1508	PDH15016	37
					PDH1518	PDH15116	37
		200			PDH2008	PDH20016	37
					PDH2018	PDH20116	37
PGH		50			PGH50N8	PGH50N16	37
		75			PGH75N8	PGH75N16	37
		100			PGH100N8	PGH100N16	37
					PGH101N8		37
		150			PGH150N8	PGH150N16	37
		200			PGH200N8	PGH200N16	37
PFT		150		PFT1506N			37
		200	PFT2004N				37
			PFT2014N				37

2. 製品早見表 Quick Reference

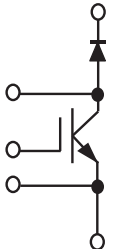
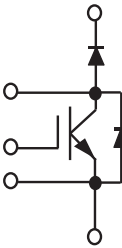
2-2-5. MOSFET モジュール MOSFET Modules (※生産中止予定 To be discontinued)

Series	Circuit	$V_{DSS}[V]$		450	500	Page
		$I_o [A]$				
PDM-L		30		PD4M441L	PD4M440L	38
		50		PD7M441L	PD7M440L	38
		70		PD10M441L	PD10M440L	38
PDM-H		30		PD4M441H	PD4M440H	38
		50		PD7M441H	PD7M440H	38
					PDM505HA	38
		75			PDM755HA	38
		85		PD10M441H	PD10M440H	38
		140			PDM1405HA	38
P2HM-L		30		P2H4M441L	P2H4M440L	38
		50		P2H7M441L	P2H7M440L	38
		70		P2H10M441L	P2H10M440L	38
P2HM-H		30		P2H4M441H	P2H4M440H	38
		50		P2H7M441H	P2H7M440H	38
					P2HM505HA	38
		75			P2HM755HA	38
		85		P2H10M441H	P2H10M440H	38

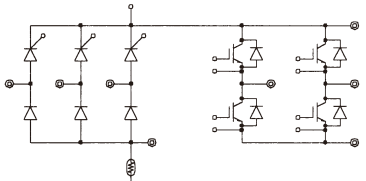
2-2-6. IGBT モジュール (1/2) IGBT Modules(1/2)

Series	Circuit	$V_{CES}[V]$		650	1200	Page
		I_o [A]				
PHMB		50			PHMB50W12CL	39
PDMB		50	PDMB50W6		PDMB50W12	39
		75	PDMB75W6		PDMB75W12	39
		100	PDMB100W6		PDMB100W12	39
		150	PDMB150W6		PDMB150W12	39
		200	PDMB200W6		PDMB200W12	39
		300	PDMB300W6		PDMB300W12	39
		400	PDMB400W6		PDMB400W12	39
		600			PDMB600W12	39
PCHMB		50	PCHMB50W6		PCHMB50W12	39
		75	PCHMB75W6		PCHMB75W12	39
		100	PCHMB100W6		PCHMB100W12	39
		150	PCHMB150W6		PCHMB150W12	39
		200	PCHMB200W6		PCHMB200W12	39
		300	PCHMB300W6		PCHMB300W12	39
		400	PCHMB400W6		PCHMB400W12	39
PCFMB		50	PCFMB50W6		PCFMB50W12	39
		75	PCFMB75W6		PCFMB75W12	39
		100	PCFMB100W6		PCFMB100W12	39
		150	PCFMB150W6		PCFMB150W12	39
		200	PCFMB200W6		PCFMB200W12	39
		300	PCFMB300W6		PCFMB300W12	39
		400	PCFMB400W6		PCFMB400W12	39

2-2-6. IGBT モジュール (2/2) IGBT Modules (2/2)

Package	Circuit	$V_{CES} [V]$	650	1200	Page
		$I_o [A]$			
PRHMB		50	PRHMB50W6	PRHMB50W12	40
		75	PRHMB75W6	PRHMB75W12	40
		100	PRHMB100W6	PRHMB100W12	40
		150	PRHMB150W6	PRHMB150W12	40
		200	PRHMB200W6	PRHMB200W12	40
		300	PRHMB300W6	PRHMB300W12	40
		400	PRHMB400W6	PRHMB400W12	40
PRFMB		50	PRFMB50W6	PRFMB50W12	40
		75	PRFMB75W6	PRFMB75W12	40
		100	PRFMB100W6	PRFMB100W12	40
		150	PRFMB150W6	PRFMB150W12	40
		200	PRFMB200W6	PRFMB200W12	40
		300	PRFMB300W6	PRFMB300W12	40
		400	PRFMB400W6	PRFMB400W12	40

2-2-7. パワーインテグレートドモジュール Power Integrated Modules

Package	Circuit	$V_{CES} [V]$	800	Page
		$I_o [A]$		
PVD		50	PVD30E8	40

2-2-8. ソリッドステートリレー Solid State Relays (SSR)

AC リレー AC Relays

Rated Voltage [V]	240 [V _{rms}]		Page
	非ゼロ電圧スイッチング AC Relays/Non Zero-Cross Switching Type	ゼロ電圧スイッチング AC Relays/Zero-Cross Switching Type	
Load Current [A]	1.0	D2N201LD	41
		D2N201LE	41
		D2N201LF	41
		D2N201LG	41
2.0	2.0	D2N202LD	41
		D2N202LE	41
		D2N202LF	41
		D2N202LG	41
3.0	3.0	D2N203LD	41
		D2N203LE	41
		D2N203LF	41
		D2N203LG	41
15.0		PHA15DW2RP	41
25.0		PHA25DW2RP	41
35.0		PHA35DW2RP	41
45.0		PHA45DW2RP	41

2. 製品早見表 Quick Reference

2-3. ハイパワー製品 Hi Power Products

2-3-1. 一般整流ダイオード Rectifier Diodes

Case Style	Parts No.	I _o [A]	V _{RRM} [V]														Page
			100	200	400	600	800	1000	1200	1400	1600	1800	2000	2500	3000	4000	
スタッド型 Stud	15MA	25													○	○	42
	61M	60						○			○						42
	61MA							○			○						42
	80MCB	80										○		○			43
	100MAB	100										○	○		○		43
	151M	150				○	○	○	○	○	○						42
	45MA		○	○	○	○	○	○	○	○	○						42
	200MCB	200										○	○	○			43
	200MAB											○	○	○	○		43
	251M	250				○	○	○	○	○	○						42
	70MA		○	○	○	○	○	○	○	○	○						42
	300MCB	300										○	○	○			43
	400MAB	400										○	○	○	○		43
	250MA	700				○	○	○	○	○	○	○					42
平型 Flat Package	253PJA	250				○	○	○	○	○	○						44
	303PJA	300										○	○	○			44
	403PJA	400				○	○		○	○	○						44
	503PJA	500										○	○	○			44
	603PJA	600												○		○	44
	703PJA	700				○	○	○	○	○	○						44
	801PJA	800												○		○	44
	1003PJA	1000												○	○		44
	1500PJA	1500	○	○	○												44
	1603PJA	1600												○	○		44
	3500PJA	3500	○	○	○												44

2-3-2. ファストリカバリダイオード Fast Recovery Diodes

Case Style	Parts No.	I _o [A]	V _{RRM} [V]							Page
			1600	1800	2000	2500	3000	4000	4500	
スタッド型 Stud	15MLA	25	○	○	○					45
	15MLS		○		○	○				45
	100MLAB	100	○							45
	100MLS		○		○	○				45
	120FLAS	150					○	○	○	45
	120FLCS						○	○	○	45
	200FLAB	200			○	○	○			45
	200FLCB					○	○			45

2-3-3. サイリスタ Thyristors

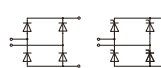
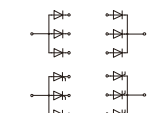
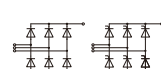
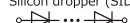
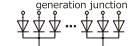
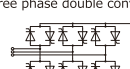
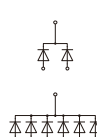
Case Style	Parts No.	I _o [A]	V _{DRM} [V]												Page
			100	200	400	600	800	1000	1200	1400	1600	1800	2000	2500	
スタッド型 Stud	68RP	60	○	○	○	○	○								46
	68RS							○	○	○	○				47
	78RT	70										○	○	○	47
	88RP	80		○	○	○	○								46
	88RS							○	○	○	○				47
	108RP	100	○	○	○	○	○								46
	128RS	120						○	○	○	○				47
	158RP	150	○	○	○	○	○								46
	158RT											○	○	○	47
	178RS	175						○	○	○	○				47
	208RP	200	○	○	○	○	○								46
	258RT	250										○	○	○	47
	278RS	270						○	○	○	○				47
	308RP	300	○	○	○	○	○								46
	358RS	350						○	○	○	○				47
	408RP	400	○	○	○	○	○								46
	508RP	500		○	○										46
平型 Flat Package	253PA	250						○	○	○	○				48
	403PAB	400										○	○	○	48
	503PA	500				○	○	○	○	○	○				48
	503PAB											○	○	○	48
	553PA	550				○	○	○	○	○	○				48
	803PA	800		○	○	○	○	○	○						48
	853PA	850									○				48
	853PAB											○		○	48
	1003PA	1000						○	○	○	○				48
	1003PAB											○	○	○	48
	1503PA	1500			○	○	○	○	○		○				48
	3003PA	3000			○		○	○	○		○				48
	4003PA	4000			○	○	○								48

2. 製品早見表 Quick Reference

2-3-4. 高速スイッチングサイリスタ Fast Turn-Off Thyristors

Case Style	Parts No.	I _o [A]	V _{DRM} [V]						Page
			100	200	400	600	800	1000	
スタッド型 Stud	88RLE	80				○	○		49
	88RLF					○	○		49
	88RLG							○	49
	88RLH							○	49
	178RLE	175				○	○		49
	178RLF					○	○		49
	178RLG							○	49
	178RLH							○	49
	208RLE	200		○	○				49
	258RLG	250						○	49
	258RLH							○	49
	308RLE	300				○	○		49
	308RLF					○	○		49
	358RLE	350		○	○				49
平型 Flat Package	1003PLF	1000						○	50
	1003PLH							○	50
	2503PLF	2500						○	50
	2503PLH							○	50

2-4. スタック製品 Stack Products

分類 Classification	回路構成 Circuit	出力電流(A) Output current									
		10	50	100	500	1,000	5,000	10,000	50,000	100,000	
汎用整流スタック General rectifier stack	単相全波整流 Single phase half-wave rectifier stack 	P-type stack	F-type stack	G-type stack							
	三相半波整流 Three phase half-wave rectifier 	P-type stack	F-type stack	G-type stack	X-type, KS-type stack						
	三相全波整流 Three phase full-wave rectifier stack 				H-type, T-type	AJ, AP, AV, FW, GY-type stack					
	単相半波整流 Single phase half-wave rectifier stack 				D-type stack						
用途別スタック Stack products by applications	逆流防止スタック Backflow prevention stack 		BD series								
	シリコンドロップスタック Silicon dropper (SID) stack 		SD Series								
	太陽光発電接続箱用 逆流防止スタック Backflow prevention stack for photovoltaic power generation junction box 										
	単相交流電力調整用スタック Single phase AC control stack 			Module package device stack			Flat package device stack				
	三相交流電力調整用スタック Three phase AC control stack 			Module package device stack			Flat package device stack				
	三相UPS用ACスイッチスタック AC switching stack for three phase UPS 						Flat package device stack (Short time ratings)				
	三相サイリスタダブルコンバータスタック Three phase double converter stack 						Flat package device stack				
	高電圧スタック High voltage rectifier stack	15MA									
	抵抗溶接機 1次側 サイリスタスイッチ Thyristor switch for primary resistance welding 						A series				
							I-N series				
	抵抗溶接機 2次側 整流スタック Water cooling diode stack for secondary resistance welding 						JD series				
									AN series		
		10	50	100	500	1,000	5,000	10,000	50,000	100,000	
		出力電流(A) Output current									

3. 定格・特性表 Specifications

3-1. ディスクリート製品 Discrete Products

3-1-1. 一般整流ダイオード Rectifier Diodes

Outline	Parts No.	V _{RRM} [V]	I _o [A]	I _{FSM} [A]	I _R [mA]	V _{FM} [V]		T _{JW} , T _{stg} [°C]	R _{th(j-c)} [°C/W]	Weight [g]	Outline No.	Connection type
							@IFM [A]					
3Max×ϕ 2.7 (DO-41S)	10EDB40	400	1.0	45	0.01	1.00	1.0	-40 to +150	110.0 (j-a)*	0.170	A-1	A
	10EDB60	600	1.0	45	0.01	1.00	1.0	-40 to +150	110.0 (j-a)*	0.170		
DO-204AC (DO-15)	20CDA40	400	2.0	75	0.01	1.00	2.0	-40 to +150	17.0 (j-l)	0.350	A-2	
	20CDA60	600	2.0	75	0.01	1.00	2.0	-40 to +150	17.0 (j-l)	0.350		
DO-201AD	30GDA40	400	3.0	100	0.01	1.00	3.0	-40 to +150	13.0 (j-l)	1.050	A-3	
	30GDA60	600	3.0	100	0.01	1.00	3.0	-40 to +150	13.0 (j-l)	1.050		
SOD-123	EP05DA40	400	0.5	8	0.01	1.10	0.5	-40 to +150	70.0 (j-l)	0.011	A-5	
DO-214AC (SMA)	EC10DA40	400	1.0	25	0.01	1.05	1.0	-40 to +150	108.0 (j-a)*	0.060	A-6	
	EC10DS4	400	1.0	25	0.01	1.10	1.0	-40 to +150	108.0 (j-a)*	0.060		
nSMC	NSD03A40	400	3.0	80	0.05	1.00	3.0	-40 to +150	13.0 (j-l)	0.160	A-9	
TO-220 Full-Mold 2pin	FSD20A90	900	20.0	200	0.05	1.25	20.0	-40 to +150	1.50	1.700	A-15	J

* : 詳細な測定条件は、別途仕様書のご確認をお願い致します。 *: For more specific condition of measurement, please check data sheet.

3-1-2. ファストリカバリダイオード（単体）(1/2) Fast Recovery Diodes (Single chip) (1/2)

Outline	Parts No.	V _{RRM} [V]	I _o [A]	I _{FSM} [A]	I _R [mA]	V _{FM} [V]	@IFM [A]	T _{jw} , T _{stg} [°C]	R _{th(j-c)} [°C/W]	trr [ns]	Weight [g]	Outline No.	Connection type					
3Max×ϕ 2.7 (DO-41S)	11EFS2	200	1.0	30	0.010	0.98	1.0	-40 to +150	110.0 (j-a)*	30	0.170	A-1	A					
	11EFS4	400	1.0	30	0.020	1.25	1.0	-40 to +150	110.0 (j-a)*	30	0.170							
DO-204AC (DO-15)	20CFA40	400	2.0	50	0.010	1.28	2.0	-40 to +150	17.0 (j-l)	35	0.350	A-2						
	20CFB60	600	2.0	50	0.010	1.58	2.0	-40 to +150	17.0 (j-l)	35	0.350							
DO-201AD	30GFA20	200	3.0	60	0.010	0.98	3.0	-40 to +150	13.0 (j-l)	30	1.050	A-3						
	30GFA40	400	3.0	60	0.020	1.25	3.0	-40 to +150	13.0 (j-l)	30	1.050							
	30GFD60	600	3.0	45	0.020	1.45	3.0	-40 to +150	13.0 (j-l)	45	1.050							
	30GFB60	600	3.0	45	0.020	1.70	3.0	-40 to +150	13.0 (j-l)	35	1.050							
SOD-123	EP05FA20	200	0.5	8	0.010	0.95	0.5	-40 to +150	70.0 (j-l)	30	0.011	A-5						
	EP04RA60	600	0.4	8	0.010	1.32	0.4	-40 to +150	70.0 (j-l)	40	0.011							
DO-214AC (SMA)	EC11FS2	200	1.0	20	0.010	0.98	1.0	-40 to +150	108.0 (j-a)*	30	0.060	A-6						
	EC10UA20	200	1.0	20	0.020	1.10	1.0	-40 to +150	108.0 (j-a)*	20	0.060							
	EC30FA20	200	3.0	45	0.010	0.98	3.0	-40 to +150	23.0 (j-l)	30	0.060							
	EC11FS4	400	1.0	20	0.020	1.25	1.0	-40 to +150	108.0 (j-a)*	30	0.060							
	EC30FA40	400	3.0	45	0.020	1.25	3.0	-40 to +150	23.0 (j-l)	30	0.060							
	EC8FS6	600	0.8	20	0.020	1.32	0.8	-40 to +150	108.0 (j-a)*	80	0.060							
	EC30FH60	600	3.0	35	0.020	1.22	3.0	-40 to +150	23.0 (j-l)	60	0.060							
nSMC	NSF03A20	200	3.0	45	0.010	0.98	3.0	-40 to +150	13.0 (j-l)	30	0.160	A-9						
	NSF03A40	400	3.0	45	0.020	1.25	3.0	-40 to +150	13.0 (j-l)	30	0.160							
	NSF03E60	600	3.0	60	0.020	1.28	3.0	-40 to +150	13.0 (j-l)	75	0.160							
	NSF03B60	600	3.0	45	0.020	1.70	3.0	-40 to +150	13.0 (j-l)	35	0.160							
	NSU03A60	600	3.0	35	0.020	2.30	3.0	-40 to +150	13.0 (j-l)	32	0.160							
TO-277	VSF05A20	200	5.0	80	0.010	0.98	5.0	-55 to +175	9.0 (j-l)	35	0.086	A-10	L					
TO-251	EA31FS4	400	3.0	45	0.020	1.25	3.0	-40 to +150	6.00	30	0.350	A-11	C					
TO-252 (Dpak)	EA31FS2-F	200	3.0	45	0.010	0.98	3.0	-40 to +150	6.00	30	0.300	A-12						
	EA31FS4-F	400	3.0	45	0.020	1.25	3.0	-40 to +150	6.00	30	0.300							
	ESF03B60-F	600	3.0	45	0.020	1.70	3.0	-40 to +150	6.00	35	0.300							
	ESF03F60-F	600	3.0	45	0.020	1.70	3.0	-55 to +175	6.00	35	0.300							
	ESF05H60-F	600	5.0	80	0.020	1.35	5.0	-55 to +175	6.00	90	0.300							
	ESF08HU60B-F	600	8.0	80	0.020	1.52	8.0	-55 to +175	6.00	100	0.300							
													H					

3-1-2. ファストリカバリダイオード（単体）(2/2) Fast Recovery Diodes (Single chip) (2/2)

Outline	Parts No.	V _{RRM} [V]	I _o [A]	I _{FSM} [A]	I _R [mA]	V _{FM} [V]	@IFM [A]	T _{JW} ・T _{stg} [°C]	R _{th(j-c)} [°C/W]	trr [ns]	Weight [g]	Outline No.	Connection type
TO-220 2pin	GSF05A20	200	5.0	80	0.020	0.98	5.0	-40 to +150	5.00	35	1.850	A-13	I
	GSF10A20	200	10.0	120	0.025	1.03	10.0	-40 to +150	4.00	35	1.850		
	GSF05A40	400	5.0	80	0.030	1.25	5.0	-40 to +150	5.00	45	1.850		
	GSF10A40	400	10.0	120	0.030	1.30	10.0	-40 to +150	4.00	45	1.850		
	GSF05F60	600	5.0	80	0.020	1.70	5.0	-40 to +175	5.00	40	1.850		
TO-220 FullMold 2pin	FSF05A20	200	5.0	80	0.020	0.98	5.0	-40 to +150	5.00	35	1.700	A-15	J
	FSU05A20	200	5.0	100	0.020	1.10	5.0	-40 to +150	5.00	27	1.700		
	FSF10A20	200	10.0	120	0.025	1.03	10.0	-40 to +150	4.00	35	1.700		
	FSU10A20	200	10.0	120	0.025	1.13	10.0	-40 to +150	4.00	32	1.700		
	FSU05A30	300	5.0	100	0.025	1.30	5.0	-40 to +150	5.00	30	1.700		
	FSU10A30	300	10.0	120	0.025	1.40	10.0	-40 to +150	4.00	35	1.700		
	FSF05A40	400	5.0	80	0.030	1.25	5.0	-40 to +150	5.00	45	1.700		
	FSU05A40	400	5.0	80	0.030	1.53	5.0	-40 to +150	5.00	32	1.700		
	FSF10A40	400	10.0	120	0.030	1.30	10.0	-40 to +150	4.00	45	1.700		
	FSU10A40	400	10.0	120	0.030	1.53	10.0	-40 to +150	4.00	40	1.700		
	FSF03F60	600	3.0	45	0.020	1.70	3.0	-55 to +175	8.00	35	1.700		
	FSF05H60	600	5.0	80	0.020	1.35	5.0	-55 to +175	5.00	90	1.700		
	FSF05HU60	600	5.0	45	0.020	1.65	5.0	-40 to +175	6.00	85	1.700		
	FSF05F60	600	5.0	80	0.020	1.70	5.0	-40 to +175	5.00	40	1.700		
	FSU05D60	600	5.0	60	0.010	2.30	5.0	-55 to +175	5.00	35	1.700		
	FSF08H60	600	8.0	100	0.020	1.35	8.0	-55 to +175	4.00	100	1.700		
	FSF08F60	600	8.0	100	0.020	1.70	8.0	-55 to +175	4.00	55	1.700		
	FSU08D60	600	8.0	90	0.020	2.30	8.0	-55 to +175	4.00	45	1.700		
	FSF10H60	600	10.0	120	0.030	1.35	10.0	-40 to +175	4.00	100	1.700		
	FSF10HU60	600	10.0	80	0.020	1.65	10.0	-40 to +175	5.00	100	1.700		
	FSF10HU60V	600	10.0	80	0.020	1.65	10.0	-40 to +175	5.00	100	1.700		
	FSF10F60	600	10.0	120	0.030	1.80	10.0	-55 to +175	4.00	65	1.700		
	FSU10D60	600	10.0	100	0.030	2.30	10.0	-55 to +175	4.00	45	1.700		
	FSU10D60V	600	10.0	100	0.030	2.30	10.0	-55 to +175	4.00	45	1.700		
	FSF15H60	600	15.0	140	0.030	1.35	15.0	-55 to +175	3.00	120	1.700		
	FSF15F60	600	15.0	140	0.030	1.57	15.0	-55 to +175	3.00	60	1.700		
	FSU15D60	600	15.0	140	0.030	2.30	15.0	-55 to +175	3.00	55	1.700		
TO-220 FullMold	FSF05A20B	200	5.0	80	0.020	0.98	5.0	-40 to +150	5.00	35	1.750	A-17	F
	FSF10A20B	200	10.0	120	0.025	1.03	10.0	-40 to +150	4.00	35	1.750		
	FSF05A40B	400	5.0	80	0.030	1.25	5.0	-40 to +150	5.00	45	1.750		
	FSF10A40B	400	10.0	120	0.030	1.30	10.0	-40 to +150	4.00	45	1.750		
	FSF05F60B	600	5.0	80	0.020	1.70	5.0	-40 to +175	5.00	40	1.750		
	FSF10F60B	600	10.0	120	0.030	1.80	10.0	-55 to +175	4.00	65	1.750		
TO-247 2pin	KSF30H60	600	30.0	250	0.050	1.35	30.0	-40 to +175	1.40	130	5.500	A-23	I
	KSF30F60	600	30.0	240	0.050	1.70	30.0	-55 to +175	1.40	60	5.500		
	KSU30D60	600	30.0	250	0.030	1.95	30.0	-55 to +175	1.40	60	5.500		
TO-247	KSF30A20B	200	30.0	400	0.025	0.98	30.0	-40 to +150	1.40	50	5.550	A-24	H
	KSU30A30B	300	30.0	400	0.050	1.33	30.0	-40 to +150	1.40	45	5.550		
	KSF30A40B	400	30.0	400	0.050	1.25	30.0	-40 to +150	1.40	60	5.550		
	KSF30F60B	600	30.0	240	0.050	1.70	30.0	-55 to +175	1.40	60	5.550		
	KSF60F60B	600	60.0	600	0.050	1.70	60.0	-55 to +175	0.75	85	5.550		
TO-247 2pin (long lead)	KSU30D60N	600	30.0	250	0.030	2.30	30.0	-55 to +175	1.40	60	5.500	A-25	I
	KSF60H60N	600	60.0	400	0.050	1.35	60.0	-55 to +175	0.75	140	5.500		
	KSF60F60N	600	60.0	600	0.050	1.70	60.0	-55 to +175	0.75	85	5.500		
	KSU60D60N	600	60.0	400	0.050	1.95	60.0	-55 to +175	0.75	65	5.500		

*: 詳細な測定条件は、別途仕様書のご確認をお願い致します。 *: For more specific condition of measurement, please check data sheet.

3. 定格・特性表 Specifications

3-1-2. ファストリカバリダイオード（複合型）(1/2) Fast Recovery Diodes (Multi chip) (1/2)

Outline	Parts No.	V _{RRM} [V]	I _o [A]	I _{FSM} [A]	I _R [mA]	V _{FM} [V]	@IFM [A]	T _{jw} , T _{stg} [°C]	R _{th(j-c)} [°C/W]	t _{rr} [ns]	Weight [g]	Outline No.	Connection type
TO-277	VCF06A20	200	6.0	60	0.010	0.93	3.0	-55 to +175	9.0 (j-l)	30.0	0.09	A-10	M
TO-251	EA21FC2	200	2.0	30	0.010	0.98	1.0	-40 to +150	6.00	30.0	0.35	A-11	B
	EA61FC2	200	6.0	45	0.010	0.98	3.0	-40 to +150	5.00	30.0	0.35		
	EA21FC4	400	2.0	30	0.020	1.25	1.0	-40 to +150	6.00	30.0	0.35		
	EA61FC4	400	6.0	45	0.020	1.25	3.0	-40 to +150	5.00	30.0	0.35		
TO-252 (Dpak)	EA21FC2-F	200	2.0	30	0.010	0.98	1.0	-40 to +150	6.00	30.0	0.30	A-12	
	EA61FC2-F	200	6.0	45	0.010	0.98	3.0	-40 to +150	5.00	30.0	0.30		
	EA21FC4-F	400	2.0	30	0.020	1.25	1.0	-40 to +150	6.00	30.0	0.30		
	EA61FC4-F	400	6.0	45	0.020	1.25	3.0	-40 to +150	5.00	30.0	0.30		
	ECF06B60-F	600	6.0	45	0.020	1.70	3.0	-40 to +150	5.00	35.0	0.30		
	ECF06F60-F	600	6.0	45	0.020	1.70	3.0	-55 to +175	5.00	35.0	0.30		
	ECU06B60-F	600	6.0	35	0.020	2.70	3.0	-40 to +150	5.00	27.0	0.30		
TO-220	GCF06A20	200	6.0	60	0.010	0.98	3.0	-40 to +150	4.00	30.0	1.90	A-14	
	GCF10A20	200	10.0	80	0.020	0.98	5.0	-40 to +150	3.00	35.0	1.90		
	GCF06A40	400	6.0	60	0.020	1.25	3.0	-40 to +150	4.00	30.0	1.90		
	GCF10A40	400	10.0	80	0.030	1.25	5.0	-40 to +150	3.00	45.0	1.90		
	GCF06F60	600	6.0	45	0.020	1.70	3.0	-55 to +175	4.00	35.0	1.90		
TO-220 Full-Mold	FCF06A20	200	6.0	60	0.010	0.98	3.0	-40 to +150	4.00	30.0	1.75	A-17	E
	FCF10A20	200	10.0	80	0.020	0.98	5.0	-40 to +150	3.00	35.0	1.75		
	FCU10A20	200	10.0	100	0.020	1.10	5.0	-40 to +150	3.00	27.0	1.75		
	FCF16A20	200	16.0	120	0.025	0.98	8.0	-40 to +150	2.00	35.0	1.75		
	FCU20A20	200	20.0	120	0.025	1.13	10.0	-40 to +150	2.00	32.0	1.75		
	FCU10A30	300	10.0	100	0.025	1.30	5.0	-40 to +150	3.00	30.0	1.75		
	FCU20D30	300	20.0	120	0.010	1.30	10.0	-55 to +175	2.00	33.0	1.75		
	FCF06A40	400	6.0	60	0.020	1.25	3.0	-40 to +150	4.00	30.0	1.75		
	FCF10A40	400	10.0	80	0.030	1.25	5.0	-40 to +150	3.00	45.0	1.75		
	FCF10A40V	400	10.0	80	0.030	1.25	5.0	-40 to +150	3.00	45.0	1.75	A-18	
	FCU10A40	400	10.0	80	0.030	1.53	5.0	-40 to +150	3.00	32.0	1.75	A-17	
	FCF16A40	400	16.0	120	0.030	1.25	8.0	-40 to +150	2.00	45.0	1.75		
	FCF20AU40	400	20.0	80	0.030	1.39	10.0	-40 to +150	3.00	45.0	1.75		
	FCU20A40	400	20.0	120	0.030	1.53	10.0	-40 to +150	2.00	40.0	1.75		
	FCF06F60	600	6.0	45	0.020	1.70	3.0	-55 to +175	4.00	35.0	1.75		
	FCF10H60	600	10.0	80	0.020	1.35	5.0	-40 to +175	3.00	90.0	1.75		
	FCF10F60	600	10.0	80	0.020	1.70	5.0	-55 to +175	3.00	40.0	1.75		
	FCU10A60	600	10.0	70	0.030	2.30	5.0	-40 to +150	3.00	35.0	1.75		
	FCU10D60	600	10.0	60	0.010	2.30	5.0	-55 to +175	3.00	35.0	1.75		
	FCF20H60	600	20.0	120	0.030	1.35	10.0	-55 to +175	4.00	100.0	1.75		
	FCF20H60V	600	20.0	120	0.030	1.35	10.0	-55 to +175	4.00	100.0	1.75	A-18	
	FCF20G60	600	20.0	120	0.030	1.50	10.0	-40 to +150	2.00	75.0	1.75	A-17	
	FCF20F60	600	20.0	120	0.030	1.80	10.0	-55 to +175	4.00	65.0	1.75		
	FCU20D60	600	20.0	100	0.030	2.30	10.0	-55 to +175	4.00	45.0	1.75		
	FRF10A20	200	10.0	80	0.020	0.98	5.0	-40 to +150	3.00	35.0	1.75		
	FRF10A40	400	10.0	80	0.030	1.25	5.0	-40 to +150	3.00	45.0	1.75		
	TO-262	TCF10A20-11A	200	10.0	80	0.020	0.98	5.0	-40 to +150	3.00	35.0	1.45	A-20
TCU20A20-11A		200	20.0	120	0.025	1.13	10.0	-40 to +150	2.00	32.0	1.45		
TCU20A30-11A		300	20.0	120	0.025	1.40	10.0	-40 to +150	2.00	35.0	1.45		
TCU20A40-11A		400	20.0	120	0.030	1.53	10.0	-40 to +150	2.00	40.0	1.45		
TCF10F60-11A		600	10.0	80	0.020	1.70	5.0	-55 to +175	3.00	40.0	1.45		
TCF20B60-11A		600	20.0	120	0.030	1.80	10.0	-40 to +150	2.00	50.0	1.75		
TO-263LP	UCU20D30	300	20.0	120	0.025	1.30	10.0	-40 to +175	2.00	33.0	0.59	A-22	E

3-1-2. ファストリカバリダイオード（複合型）(2/2) Fast Recovery Diodes (Multi chip) (2/2)

Outline	Parts No.	V _{RRM} [V]	I _o [A]	I _{FSM} [A]	I _R [mA]	V _{FM} [V]	@IFM [A]	T _{JW} , T _{stg} [°C]	R _{th(j-c)} [°C/W]	t _{rr} [ns]	Weight [g]	Outline No.	Connection type
TO-247	KCF16A20	200	16.0	120	0.025	0.98	8.0	-40 to +150	2.00	35.0	5.55	A-24	B
	KCU20A20	200	20.0	120	0.025	1.13	10.0	-40 to +150	2.00	32.0	5.55		
	KCF25A20	200	25.0	150	0.025	0.98	12.5	-40 to +150	2.00	50.0	5.55		
	KCU30A20	200	30.0	150	0.025	1.13	15.0	-40 to +150	2.00	38.0	5.55		
	KCU20A30	300	20.0	120	0.025	1.40	10.0	-40 to +150	2.00	35.0	5.55		
	KCU30A30	300	30.0	150	0.025	1.30	15.0	-40 to +150	2.00	38.0	5.55		
	KCF16A40	400	16.0	120	0.030	1.25	8.0	-40 to +150	2.00	45.0	5.55		
	KCU20A40	400	20.0	120	0.030	1.53	10.0	-40 to +150	2.00	40.0	5.55		
	KCF25A40	400	25.0	200	0.050	1.25	12.5	-40 to +150	2.00	60.0	5.55		
	KCU30A40	400	30.0	150	0.030	1.57	15.0	-40 to +150	2.00	45.0	5.55		
TO-247 (long lead)	KCF20F60	600	20.0	120	0.030	1.80	10.0	-55 to +175	2.00	65.0	5.55	A-26	
	KCF30F60N	600	30.0	140	0.030	1.57	15.0	-55 to +175	2.00	60.0	5.55		
	KCU60D60N	600	60.0	250	0.030	2.30	30.0	-55 to +175	0.75	60.0	5.55		

* : 詳細な測定条件は、別途仕様書のご確認をお願い致します。 *: For more specific condition of measurement, please check data sheet.

3-1-3. ショットキーバリアダイオード（単体）(1/2) Schottky Barrier Diodes (Single chip)

Outline	Parts No.	V _{RRM} [V]	I _o [A]	I _{FSM} [A]	I _R [mA]	V _{FM} [V]	@IFM [A]	T _{JW} , T _{stg} [°C]	R _{th(j-c)} [°C/W]	Weight [g]	Outline No.	Connection type
3Max×φ 2.7 (DO-41S)	11EQS03L	30	1.0	40	1.00	0.45	1.0	-40 to +150	110.0 (j-a)*	0.170	A-1	
	11EQS04	40	1.0	40	1.00	0.55	1.0	-40 to +150	110.0 (j-a)*	0.170		
	11EQS06	60	1.0	25	1.00	0.58	1.0	-40 to +150	110.0 (j-a)*	0.170		
DO-204AC (DO-15)	20CQA03L	30	2.0	50	0.50	0.46	2.0	-40 to +150	17.0 (j-l)	0.350	A-2	
	20CQA04	40	2.0	80	0.30	0.55	2.0	-40 to +150	17.0 (j-l)	0.350		
	20CQA06	60	2.0	45	3.00	0.60	2.0	-40 to +150	17.0 (j-l)	0.350		
DO-201AD	30GQA03L	30	3.0	120	0.50	0.45	3.0	-40 to +150	13.0 (j-l)	1.050	A-3	
	30GQA04	40	3.0	120	0.30	0.55	3.0	-40 to +150	13.0 (j-l)	1.050		
	50GQSA045	45	5.0	150	0.35	0.55	5.0	-40 to +150	13.0 (j-l)	1.050		
	30GQA06	60	3.0	75	0.30	0.58	3.0	-40 to +150	13.0 (j-l)	1.050		
	50GQSA065	65	5.0	150	0.40	0.61	5.0	-40 to +150	13.0 (j-l)	1.050		
SOD-323FL	SA10LA03	30	1.0	20	1.50	0.37	0.7	-40 to +125	30.0 (j-l)	0.004	A-4	
	SA10QA03	30	1.0	20	0.10	0.45	0.7	-40 to +150	30.0 (j-l)	0.004		
	SA10QA04	40	1.0	20	0.10	0.52	0.7	-40 to +150	30.0 (j-l)	0.004		
	SA10QA06	60	1.0	20	0.10	0.58	0.7	-40 to +150	30.0 (j-l)	0.004		
SOD-123	EP05Q03L	30	0.5	8	0.20	0.45	0.5	-40 to +150	70.0 (j-l)	0.011	A-5	A
	EP10LA03	30	1.0	12	2.00	0.39	1.0	-40 to +125	70.0 (j-l)	0.011		
	EP10QY03	30	1.0	12	1.00	0.47	1.0	-40 to +150	70.0 (j-l)	0.011		
	EP05Q04	40	0.5	8	0.10	0.51	0.5	-40 to +150	70.0 (j-l)	0.011		
	EP10QY04	40	1.0	12	1.00	0.57	1.0	-40 to +150	70.0 (j-l)	0.011		
	EP05Q06	60	0.5	8	0.10	0.62	0.5	-40 to +150	70.0 (j-l)	0.011		
DO-214AC (SMA)	EC10LA03	30	1.0	25	2.00	0.39	1.0	-40 to +125	108.0 (j-a)*	0.060	A-6	
	EC10QS03L	30	1.0	20	1.00	0.45	1.0	-40 to +150	108.0 (j-a)*	0.060		
	EC21QS03L	30	2.0	50	2.00	0.47	2.0	-40 to +150	23.0 (j-l)	0.060		
	EC31QS03L	30	3.0	60	3.00	0.45	3.0	-40 to +150	23.0 (j-l)	0.060		
	EC10QS04	40	1.0	20	1.00	0.55	1.0	-40 to +150	108.0 (j-a)*	0.060		
	EC21QS04	40	2.0	60	1.00	0.55	2.0	-40 to +150	23.0 (j-l)	0.060		
	EC31QS04	40	3.0	60	3.00	0.55	3.0	-40 to +150	23.0 (j-l)	0.060		
	EC20QSA045	45	2.0	50	0.20	0.55	2.0	-40 to +150	23.0 (j-l)	0.060		
	EC30QSA045	45	3.0	60	0.30	0.55	3.0	-40 to +150	23.0 (j-l)	0.060		
	EC10QS06	60	1.0	20	1.00	0.58	1.0	-40 to +150	108.0 (j-a)*	0.060		
	EC21QS06	60	2.0	40	2.00	0.61	2.0	-40 to +150	23.0 (j-l)	0.060		
	EC31QS06	60	3.0	50	3.00	0.61	3.0	-40 to +150	23.0 (j-l)	0.060		
	EC20QSA065	65	2.0	50	0.20	0.61	2.0	-40 to +150	23.0 (j-l)	0.060		
	EC30QSA065	65	3.0	60	0.30	0.61	3.0	-40 to +150	23.0 (j-l)	0.060		

3. 定格・特性表 Specifications

3-1-3. ショットキーバリアダイオード（単体）(2/2) Schottky Barrier Diodes (Single chip) (2/2)

Outline	Parts No.	V _{RRM} [V]	I _o [A]	I _{FSM} [A]	I _R [mA]	V _{FM} [V]	@I _{FM} [A]	T _{jw} , T _{stg} [°C]	R _{th(j-c)} [°C/W]	Weight [g]	Outline No.	Connection type
NA (DO221BC)	NA03QSA035	35	3.0	60	2.00	0.47	3.0	-40 to +150	13.0 (j-l)	0.03	A-7	A
	NA05QSA035	35	5.0	100	3.00	0.47	5.0	-40 to +150	13.0 (j-l)	0.03		
	NA03QSA045	45	3.0	60	0.20	0.55	3.0	-40 to +150	13.0 (j-l)	0.03		
	NA03QSAU045	45	3.0	50	0.15	0.59	3.0	-40 to +150	13.0 (j-l)	0.03		
	NA05QSA045	45	5.0	100	0.35	0.57	5.0	-40 to +150	13.0 (j-l)	0.03		
	NA03QSA065	65	3.0	60	0.30	0.61	3.0	-40 to +150	13.0 (j-l)	0.03		
	NA03QSAU065	65	3.0	50	0.15	0.69	3.0	-40 to +150	13.0 (j-l)	0.03		
	NA05QSA065	65	5.0	100	0.40	0.61	5.0	-40 to +150	13.0 (j-l)	0.03		
nSMC	NSQ03A03L	30	3.0	100	3.00	0.45	3.0	-40 to +150	13.0 (j-l)	0.16	A-9	
	NSQ03A04	40	3.0	80	3.00	0.55	3.0	-40 to +150	13.0 (j-l)	0.16		
	NSQ03A06	60	3.0	50	3.00	0.58	3.0	-40 to +150	13.0 (j-l)	0.16		
TO-277	VSQS10A045	45	10.0	280	0.60	0.56	10.0	-40 to +150	9.0 (j-l)	0.09	A-10	L
	VSQS15A045	45	15.0	230	1.00	0.54	15.0	-40 to +150	6.0 (j-l)	0.09		
	VSQS10A065	65	10.0	140	0.20	0.65	10.0	-40 to +150	9.0 (j-l)	0.09		
TO-251	EA30QS04	40	3.0	45	3.00	0.55	3.0	-40 to +150	6.00	0.35	A-11	C
TO-252 (Dpak)	EA30QS03L-F	30	3.0	45	3.00	0.45	3.0	-40 to +150	6.00	0.30	A-12	
	EA20QS04-F	40	1.7	40	2.00	0.55	2.0	-40 to +150	7.00	0.30		
	EA30QS04-F	40	3.0	45	3.00	0.55	3.0	-40 to +150	6.00	0.30		
	EA20QS06-F	60	1.7	40	2.00	0.58	1.7	-40 to +150	7.00	0.30		
	EA30QS06-F	60	3.0	45	3.00	0.58	3.0	-40 to +150	6.00	0.30		
TO-220 2pin	GSQ05A04	40	5.0	120	5.00	0.55	5.0	-40 to +150	5.00	1.85	A-13	I
	GSQ10A04	40	10.0	180	10.00	0.59	10.0	-40 to +150	3.00	1.85		
	GSQ05A06	60	5.0	110	5.00	0.58	5.0	-40 to +150	5.00	1.85		
	GSQ10A06	60	10.0	150	10.00	0.67	10.0	-40 to +150	3.00	1.85		
TO-220 Full-Mold 2pin	FSQ05A03L	30	5.0	120	5.00	0.47	5.0	-40 to +150	5.00	1.70	A-15	J
	FSQS05A045	45	5.0	120	0.35	0.54	5.0	-40 to +150	5.00	1.70		
	FSQS10A045	45	10.0	180	0.60	0.54	10.0	-40 to +150	3.00	1.70		
	FSQS15A045	45	15.0	200	1.00	0.54	15.0	-40 to +150	3.00	1.70		
	FSQS15A045V	45	15.0	200	1.00	0.54	15.0	-40 to +150	3.00	1.70		
	FSQS30A045	45	30.0	400	1.00	0.56	30.0	-40 to +150	1.50	1.70	A-15	
	FSQS05A065	65	5.0	120	0.40	0.58	5.0	-40 to +150	5.00	1.70		
	FSQS05AU065	65	5.0	100	0.30	0.69	5.0	-40 to +150	5.00	1.70		
	FSQS10A065	65	10.0	180	1.00	0.60	10.0	-40 to +150	3.00	1.70		
TO-247 2pin	KSQ15A04	40	15.0	250	15.00	0.55	15.0	-40 to +150	2.00	5.50	A-23	I
	KSQ30A04	40	30.0	400	25.00	0.58	30.0	-40 to +150	1.30	5.50		
	KSQ15A06	60	15.0	200	15.00	0.65	15.0	-40 to +150	2.00	5.50		
	KSQ30A06	60	30.0	400	25.00	0.67	30.0	-40 to +150	1.30	5.50		

*：詳細な測定条件は、別途仕様書のご確認をお願い致します。

*: For more specific condition of measurement, please check data sheet.

3-1-3. ショットキーバリアダイオードHシリーズ〈低リーク品〉(単体) Schottky Barrier Diodes H-Series <Low-IR type> (Single chip)

Outline	Parts No.	V _{RRM} [V]	I _o [A]	I _{FSM} [A]	I _R [mA]	V _{FM} [V]	@IFM [A]	T _{JW} , T _{slg} [° C]	R _{th(j-c)} [° C/W]	Weight [g]	Outline No.	Connection type
3Max× ϕ 2.7 (DO-41S)	11EQS10	100	1.0	40	0.50	0.85	1.0	-40 to +150	110.0 (j-a)*	0.17	A-1	A
	10EHA20	200	1.0	20	0.20	0.90	1.0	-40 to +150	110.0 (j-a)*	0.17		
DO-204AC (DO-15)	20CHA10	100	2.0	70	0.20	0.85	2.0	-40 to +150	17.0 (j-l)	0.35	A-2	
	20CHA20	200	2.0	40	0.20	0.90	2.0	-40 to +150	17.0 (j-l)	0.35		
DO-201AD	50GHA08	80	5.0	120	0.10	0.70	5.0	-40 to +150	13.0 (j-l)	1.05	A-3	
	30GHA10	100	3.0	100	0.20	0.85	3.0	-40 to +150	13.0 (j-l)	1.05		
	50GHA12	120	5.0	120	0.10	0.86	5.0	-40 to +150	13.0 (j-l)	1.05		
	30GHA20	200	3.0	60	0.20	0.90	3.0	-40 to +150	13.0 (j-l)	1.05		
SOD-123	EP10HY03	30	1.0	12	0.50	0.56	1.0	-40 to +150	70.0 (j-l)	0.01	A-5	
	EP05H10	100	0.5	8	0.05	0.80	0.5	-40 to +150	70.0 (j-l)	0.01		
DO-214AC (SMA)	EC30HA03L	30	3.0	60	0.50	0.54	3.0	-40 to +150	23.0 (j-l)	0.06	A-6	
	EC30HA04	40	3.0	60	0.50	0.59	3.0	-40 to +150	23.0 (j-l)	0.06		
	EC10QS10	100	1.0	20	0.50	0.85	1.0	-40 to +150	108.0 (j-a)*	0.06		
	EC21QS10	100	2.0	50	1.00	0.85	2.0	-40 to +150	23.0 (j-l)	0.06		
	EC31QS10	100	3.0	60	2.00	0.85	3.0	-40 to +150	23.0 (j-l)	0.06		
NA (DO221BC)	NA03HSA045	45	3.0	60	0.07	0.59	3.0	-40 to +150	13.0 (j-l)	0.03	A-7	
	NA05HSA045	45	5.0	120	0.10	0.59	5.0	-40 to +150	13.0 (j-l)	0.03		
	NA03HSA065	65	3.0	80	0.07	0.66	3.0	-40 to +150	13.0 (j-l)	0.03		
	NA05HSA065	65	5.0	120	0.10	0.66	5.0	-40 to +150	13.0 (j-l)	0.03		
	NA03HSA08	80	3.0	80	0.10	0.70	3.0	-40 to +150	13.0 (j-l)	0.03		
	NA05HSA08	80	5.0	120	0.10	0.70	5.0	-40 to +150	13.0 (j-l)	0.03		
	NA03HSA12	120	3.0	60	0.07	0.86	3.0	-40 to +150	13.0 (j-l)	0.03		
	NA05HSA12	120	5.0	100	0.10	0.86	5.0	-40 to +150	13.0 (j-l)	0.03		
	NA03HA15	150	3.0	60	1.00	0.90	3.0	-40 to +150	13.0 (j-l)	0.03		
	NA03HA20	200	3.0	110	1.00	0.90	3.0	-40 to +150	13.0 (j-l)	0.03		
nSMC	NSH03A03L	30	3.0	80	0.50	0.53	3.0	-40 to +150	13.0 (j-l)	0.16	A-9	
	NSH05A03	30	5.0	100	1.00	0.57	5.0	-40 to +150	13.0 (j-l)	0.16		
	NSH03A04	40	3.0	80	0.50	0.58	3.0	-40 to +150	13.0 (j-l)	0.16		
	NSHS05A065	65	5.0	130	0.10	0.64	5.0	-40 to +150	13.0 (j-l)	0.16		
	NSH03A10	100	3.0	60	1.00	0.85	3.0	-40 to +150	13.0 (j-l)	0.16		
	NSH03A15	150	3.0	60	1.00	0.90	3.0	-40 to +150	13.0 (j-l)	0.16		
TO-277	VSHS15A08	80	15.0	150	0.10	0.76	15.0	-40 to +150	6.0 (j-l)	0.09	A-10	L
	VSHS03A12	120	3.0	70	0.07	0.86	3.0	-40 to +150	9.0 (j-l)	0.09		
	VSHS10A12	120	10.0	190	0.10	0.89	10.0	-40 to +150	9.0 (j-l)	0.09		
	VSHS15A12	120	15.0	150	0.10	0.92	15.0	-40 to +150	6.0 (j-l)	0.09		
TO-251	EA20QS10	100	1.7	40	1.00	0.85	2.0	-40 to +150	7.00	0.35	A-11	C
TO-252 (Dpak)	EA20QS10-F	100	1.7	40	1.00	0.85	2.0	-40 to +150	7.00	0.30	A-12	
	EA30QS10-F	100	3.0	45	1.00	0.85	3.0	-40 to +150	6.00	0.30		
	ESH05A15-F	150	5.0	130	1.00	0.88	5.0	-40 to +150	5.00	0.30		H
TO-220 2pin	GSH05A10	100	5.0	120	1.00	0.85	5.0	-40 to +150	5.00	1.85	A-13	I
	GSH10A10	100	10.0	180	1.00	0.88	10.0	-40 to +150	3.00	1.85		
TO-220 Full-Mold 2pin	FSH05A03L	30	5.0	120	1.00	0.57	5.0	-40 to +150	5.00	1.70	A-15	J
	FSH10A03L	30	10.0	180	1.00	0.54	10.0	-40 to +150	3.00	1.70		
	FSHS05A065	65	5.0	120	0.10	0.63	5.0	-40 to +150	5.00	1.70		
	FSHS05A08	80	5.0	120	0.10	0.72	5.0	-40 to +150	5.00	1.70		
	FSH04A10	100	4.0	100	1.00	0.88	4.0	-40 to +150	6.00	1.70		
	FSH05A10	100	5.0	120	1.00	0.85	5.0	-40 to +150	5.00	1.70		
	FSH10A10	100	10.0	180	1.00	0.88	10.0	-40 to +150	3.00	1.70		
	FSHS04A12	120	4.0	100	0.10	0.89	4.0	-40 to +150	6.00	1.70		
	FSH05A15	150	5.0	130	1.00	0.88	5.0	-40 to +150	5.00	1.70		
	FSH10A15	150	10.0	180	1.00	0.90	10.0	-40 to +150	3.00	1.70		
	FSH05A20	200	5.0	100	0.20	0.90	5.0	-40 to +150	5.00	1.70		
TO-247 2pin	KSH15A10	100	15.0	250	2.00	0.88	15.0	-40 to +150	2.00	5.50	A-23	I
	KSH30A20	200	30.0	300	0.50	0.95	30.0	-40 to +150	1.30	5.50		

*: 詳細な測定条件は、別途仕様書のご確認をお願い致します。

*: For more specific condition of measurement, please check data sheet.

3. 定格・特性表 Specifications

3-1-3. ショットキーバリアダイオード（複合）(1/2) Schottky Barrier Diodes (Multi chip) (1/2)

Outline	Parts No.	V _{RRM} [V]	I _o [A]	I _{FSM} [A]	I _R [mA]	V _{FM} [V]		T _{jw} , T _{stg} [°C]	R _{th(j-c)} [°C/W]	Weight [g]	Outline No.	Connection type		
							@IFM [A]							
NB	NB06QSA035	35	6.0	60	2.00	0.47	3.0	-40 to +150	7.0 (j-H)	0.06	A-8	K		
	NB10QSA035	35	10.0	100	3.00	0.47	5.0	-40 to +150	7.0 (j-H)	0.06				
	NB06QSA045	45	6.0	60	0.20	0.55	3.0	-40 to +150	7.0 (j-H)	0.06				
	NB10QSA045	45	10.0	100	0.35	0.57	5.0	-40 to +150	7.0 (j-H)	0.06				
	NB06QSA065	65	6.0	60	0.30	0.61	3.0	-40 to +150	7.0 (j-H)	0.06				
	NB10QSA065	65	10.0	100	0.40	0.61	5.0	-40 to +150	7.0 (j-H)	0.06				
TO-251	ECL06B03	30	6.0	45	3.00	0.47	3.0	-40 to +100 (Tstg=-40+125)	5.00	0.35	A-11			
	EA40QC04	40	4.0	40	2.00	0.55	2.0	-40 to +150	5.50	0.35				
	EA60QC04	40	6.0	45	3.00	0.55	3.0	-40 to +150	5.00	0.35				
	EA60QC06	60	6.0	45	3.00	0.58	3.0	-40 to +150	5.00	0.35				
TO-252 (Dpak)	EA60QC03L-F	30	6.0	45	3.00	0.45	3.0	-40 to +150	5.00	0.30	A-12	B		
	ECL06B03-F	30	6.0	45	3.00	0.47	3.0	-40 to +100 (Tstg=-40+125)	5.00	0.30				
	ECQS10A035-F	35	10.0	100	3.00	0.47	5.0	-40 to +150	4.00	0.30				
	EA20QC04-F	40	2.0	20	1.00	0.55	1.0	-40 to +150	6.00	0.30				
	EA40QC04-F	40	4.0	40	2.00	0.55	2.0	-40 to +150	5.50	0.30				
	EA60QC04-F	40	6.0	45	3.00	0.55	3.0	-40 to +150	5.00	0.30				
	ECQS10A045-F	45	10.0	120	0.35	0.57	5.0	-40 to +150	4.00	0.30				
	EA20QC06-F	60	2.0	20	1.00	0.58	1.0	-40 to +150	6.00	0.30				
	EA40QC06-F	60	4.0	40	2.00	0.60	2.0	-40 to +150	5.50	0.30				
	EA60QC06-F	60	6.0	45	3.00	0.58	3.0	-40 to +150	5.00	0.30				
TO-220	GCQ30A03L	30	30.0	250	15.00	0.49	15.0	-40 to +150	1.50	1.90	A-14			
	GCQ10A04	40	10.0	120	5.00	0.55	5.0	-40 to +150	3.00	1.90				
	GCQ20A04	40	20.0	180	10.00	0.55	10.0	-40 to +150	1.50	1.90				
	GCQ30A04	40	30.0	250	15.00	0.55	15.0	-40 to +150	1.50	1.90				
	GCQ10A06	60	10.0	110	5.00	0.58	5.0	-40 to +150	3.00	1.90				
	GCQ20A06	60	20.0	150	10.00	0.65	10.0	-40 to +150	1.50	1.90				
	GCQ30A06	60	30.0	200	15.00	0.65	15.0	-40 to +150	1.50	1.90				
TO-220 Full-Mold	FCQ08A03L	30	8.0	100	3.00	0.49	4.0	-40 to +150	3.00	1.75	A-17	E		
	FCQ10A03L	30	10.0	120	5.00	0.47	5.0	-40 to +150	3.00	1.75				
	FCQ20A03L	30	20.0	180	10.00	0.49	10.0	-40 to +150	1.50	1.75				
	FCQ30A03L	30	30.0	250	15.00	0.49	15.0	-40 to +150	1.50	1.75				
	FCQS10A035	35	10.0	120	3.00	0.46	5.0	-40 to +150	3.00	1.75				
	FCQS10A045	45	10.0	120	0.35	0.57	5.0	-40 to +150	3.00	1.75				
	FCQS10AU045	45	10.0	120	0.20	0.59	5.0	-40 to +150	3.00	1.75				
	FCQS10AU045V	45	10.0	120	0.20	0.59	5.0	-40 to +150	3.00	1.75	A-18			
	FCQS20A045	45	20.0	180	0.60	0.57	10.0	-40 to +150	2.00	1.75				
	FCQS30A045	45	30.0	200	1.00	0.55	15.0	-40 to +150	1.50	1.75				
	FCQS30AU045	45	30.0	180	0.60	0.60	15.0	-40 to +150	2.00	1.75				
	FCQS10A065	65	10.0	120	0.40	0.61	5.0	-40 to +150	3.00	1.75				
	FCQS20A065	65	20.0	180	1.00	0.63	10.0	-40 to +150	2.00	1.75				
	FCQS20BU065	65	20.0	120	0.40	0.74	10.0	-40 to +150	3.00	1.75				
	FCQS20BU065V	65	20.0	120	0.40	0.74	10.0	-40 to +150	3.00	1.75	A-18			
	FCQS30A065	65	30.0	200	1.50	0.64	15.0	-40 to +150	1.50	1.75	A-17			
	FCQS30AU065	65	30.0	180	1.00	0.69	15.0	-40 to +150	2.00	1.75				
	FRQS20A045	45	20.0	180	0.60	0.57	10.0	-40 to +150	2.00	1.75				
	FRQS20A065	65	20.0	180	1.00	0.63	10.0	-40 to +150	2.00	1.75				
														G

3-1-3. ショットキーバリアダイオード（複合）(2/2) Schottky Barrier Diodes (Multi chip) (2/2)

Outline	Parts No.	V _{RRM} [V]	I _o [A]	I _{FSM} [A]	I _R [mA]	V _{FM} [V]	@IFM [A]	T _{JW} , T _{stg} [°C]	R _{th(j-c)} [°C/W]	Weight [g]	Outline No.	Connection type
TO-262	TCQ30A06-11A	60	30.0	200	15.00	0.65	10.0	-40 ~ +150	1.50	1.45	A-20	B
TO-263LP	UCQ10A03	30	10.0	120	1.00	0.46	5.0	-40 ~ +150	2.50	0.59	A-22	E
	UCQ20B03	30	20.0	180	2.00	0.51	10.0	-40 ~ +150	2.30	0.59		
	UCQ30A03	30	30.0	230	1.50	0.50	15.0	-40 ~ +150	1.50	0.59		
	UCQS20A045	45	20.0	220	0.60	0.54	10.0	-40 ~ +150	2.00	0.59		
	UCQS30A045	45	30.0	250	1.00	0.55	15.0	-40 ~ +150	1.50	0.59		
	UCQS10A065	65	10.0	120	0.40	0.61	5.0	-40 ~ +150	2.00	0.59		
TO-247	KCQ30A03L	30	30.0	250	15.00	0.49	15.0	-40 ~ +125	1.30	5.55	A-24	B
	KCQ60A03L	30	60.0	400	25.00	0.50	30.0	-40 ~ +150	1.00	5.55		
	KCQ20A04	40	20.0	180	10.00	0.55	10.0	-40 ~ +150	1.50	5.55		
	KCQ30A04	40	30.0	300	15.00	0.55	15.0	-40 ~ +150	1.30	5.55		
	KCQ60A04	40	60.0	400	25.00	0.58	30.0	-40 ~ +150	1.00	5.55		
	KCQ20A06	60	20.0	150	10.00	0.65	10.0	-40 ~ +150	1.50	5.55		
	KCQ30A06	60	30.0	200	15.00	0.65	15.0	-40 ~ +150	1.30	5.55		
	KCQ60A06	60	60.0	400	25.00	0.67	30.0	-40 ~ +150	1.00	5.55		

* : 詳細な測定条件は、別途仕様書のご確認をお願い致します。 * : For more specific condition of measurement, please check data sheet.

3-1-3. ショットキーバリアダイオード H シリーズ <低リーク> (複合) (1/2) Schottky Barrier Diodes H-Series <Low-IR type> (Multi chip) (1/2)

Outline	Parts No.	V _{RRM} [V]	I _o [A]	I _{FSM} [A]	I _R [mA]	V _{FM} [V]	@IFM [A]	T _{JW} , T _{stg} [°C]	R _{th(j-c)} [°C/W]	Weight [g]	Outline No.	Connection type
NB	NB06HSA065	65	6.0	80	0.07	0.66	3.0	-40 ~ +150	7.0 (j-I)	0.06	A-8	K
	NB10HSA065	65	10.0	120	0.10	0.66	5.0	-40 ~ +150	7.0 (j-I)	0.06		
	NB06HSA08	80	6.0	80	0.10	0.70	3.0	-40 ~ +150	7.0 (j-I)	0.06		
	NB10HSA08	80	10.0	120	0.10	0.70	5.0	-40 ~ +150	7.0 (j-I)	0.06		
	NB06HSA12	120	6.0	60	0.07	0.86	3.0	-40 ~ +150	7.0 (j-I)	0.06		
	NB10HSA12	120	10.0	100	0.10	0.86	5.0	-40 ~ +150	7.0 (j-I)	0.06		
	NB06HA15	150	6.0	60	1.00	0.90	3.0	-40 ~ +150	7.0 (j-I)	0.06		
	NB06HA20	200	6.0	110	1.00	0.90	3.0	-40 ~ +150	7.0 (j-I)	0.06		
TO-251	EA20QC10	100	2.0	20	0.50	0.85	1.0	-40 ~ +150	6.00	0.35	A-11	
	EA40QC10	100	4.0	40	1.00	0.85	2.0	-40 ~ +150	5.50	0.35		
	EA60QC10	100	6.0	45	1.00	0.85	3.0	-40 ~ +150	5.00	0.35		
TO-252 (Dpak)	ECHS10A08-F	80	10.0	100	0.10	0.70	5.0	-40 ~ +150	4.00	0.30	A-12	B
	EA20QC10-F	100	2.0	20	0.50	0.85	1.0	-40 ~ +150	6.00	0.30		
	EA40QC10-F	100	4.0	40	1.00	0.85	2.0	-40 ~ +150	5.50	0.30		
	EA60QC10-F	100	6.0	45	1.00	0.85	3.0	-40 ~ +150	5.00	0.30		
	ECH06A20-F	200	6.0	60	0.20	0.90	3.0	-40 ~ +150	5.00	0.30		
TO-220	GCHS30A08	80	30.0	200	0.20	0.75	15.0	-40 ~ +150	1.50	1.90	A-14	
	GCH10A10	100	10.0	120	1.00	0.85	5.0	-40 ~ +150	3.00	1.90		
	GCH20A10	100	20.0	180	1.00	0.88	10.0	-40 ~ +150	1.50	1.90		
	GCH30A10	100	30.0	250	2.00	0.88	15.0	-40 ~ +150	1.50	1.90		
TO-220 Full-Mold	FCH10A03L	30	10.0	120	1.00	0.57	5.0	-40 ~ +150	3.00	1.75	A-17	E
	FCH20A03L	30	20.0	180	1.00	0.54	10.0	-40 ~ +150	1.50	1.75		
	FCH30A03L	30	30.0	250	1.00	0.56	15.0	-40 ~ +150	1.50	1.75		
	FCHS10A045	45	10.0	120	0.10	0.59	5.0	-40 ~ +150	3.00	1.75		
	FCHS20A045	45	20.0	180	0.10	0.58	10.0	-40 ~ +150	2.00	1.75		
	FCHS30A045	45	30.0	250	0.20	0.60	15.0	-40 ~ +150	1.50	1.75		
	FCHS10A065	65	10.0	120	0.10	0.66	5.0	-40 ~ +150	3.00	1.75		
	FCHS20A065	65	20.0	180	0.15	0.68	10.0	-40 ~ +150	2.00	1.75		
	FCHS30A065	65	30.0	200	0.20	0.64	15.0	-40 ~ +150	1.50	1.75		
	FCHS10A08	80	10.0	120	0.10	0.72	5.0	-40 ~ +150	3.00	1.75		
	FCHS20A08	80	20.0	180	0.15	0.75	10.0	-40 ~ +150	2.00	1.75		
	FCHS30A08	80	30.0	200	0.20	0.75	15.0	-40 ~ +150	1.50	1.75		
	FCHS30AU08	80	30.0	180	0.15	0.81	15.0	-40 ~ +150	2.00	1.75		

3. 定格・特性表 Specifications

3-1-3. ショットキーバリアダイオードHシリーズ〈低リーク〉(複合) (2/2) Schottky Barrier Diodes H-Series <Low-IR type> (Multi chip) (2/2)

Outline	Parts No.	V _{RRM} [V]	I _o [A]	I _{FSM} [A]	I _R [mA]	V _{FM} [V]		T _{jw} ・T _{stg} [°C]	R _{th(j-c)} [°C/W]	Weight [g]	Outline No.	Connection type
							@IFM [A]					
TO-220 Full-Mold	FCH05A10	100	5.0	60	1.00	0.87	2.5	-40 to +150	5.00	1.75	A-17	E
	FCH06A10	100	6.0	80	1.00	0.85	3.0	-40 to +150	5.00	1.75		
	FCH08A10	100	8.0	100	1.00	0.88	4.0	-40 to +150	3.00	1.75		
	FCH10E10	100	10.0	120	0.10	0.77	5.0	-40 to +150	3.00	1.75		
	FCH10A10	100	10.0	120	1.00	0.86	5.0	-40 to +150	3.00	1.75		
	FCH10AU10V	100	10.0	120	0.10	0.91	5.0	-40 to +150	3.00	1.75	A-18	
	FCH20E10	100	20.0	180	0.10	0.80	10.0	-40 to +150	1.50	1.75	A-17	
	FCH20E10V	100	20.0	180	0.10	0.80	10.0	-40 to +150	1.50	1.75	A-18	
	FCH20A10	100	20.0	180	1.00	0.88	10.0	-40 to +150	1.50	1.75	A-17	
	FCH20AU10V	100	20.0	180	1.00	0.90	10.0	-40 to +150	2.30	1.75	A-18	
	FCH20BU10	100	20.0	120	0.10	1.00	10.0	-40 to +150	3.00	1.75	A-17	
	FCH30E10	100	30.0	250	0.10	0.80	15.0	-40 to +150	1.50	1.75		
	FCH30E10V	100	30.0	250	0.10	0.80	15.0	-40 to +150	1.50	1.75	A-18	
	FCH30A10	100	30.0	250	2.00	0.88	15.0	-40 to +150	1.50	1.75	A-17	
	FCH30AU10	100	30.0	200	0.20	0.94	15.0	-40 to +150	1.50	1.75		
	FCH40EU10	100	40.0	250	0.10	0.87	20.0	-40 to +150	1.50	1.75		
	FCHS08A12	120	8.0	100	0.10	0.89	4.0	-40 to +150	3.00	1.75		
	FCHS10A12	120	10.0	120	0.10	0.86	5.0	-40 to +150	3.00	1.75		
	FCHS20A12	120	20.0	180	0.10	0.89	10.0	-40 to +150	2.00	1.75		
	FCHS30A12	120	30.0	200	0.10	0.90	15.0	-40 to +150	1.50	1.75		
	FCH08A15	150	8.0	125	1.00	0.90	4.0	-40 to +150	3.00	1.75		
	FCH10A15	150	10.0	130	1.00	0.88	5.0	-40 to +150	3.00	1.75		
	FCH10A15V	150	10.0	130	1.00	0.88	5.0	-40 to +150	3.00	1.75		
	FCH20A15	150	20.0	180	1.00	0.90	10.0	-40 to +150	1.50	1.75	A-17	
	FCH20BU15	150	20.0	130	0.10	1.00	10.0	-40 to +150	3.00	1.75		
	FCH20BU15V	150	20.0	130	0.10	1.00	10.0	-40 to +150	3.00	1.75	A-18	
	FCH30A15	150	30.0	250	2.00	0.91	15.0	-40 to +150	1.50	1.75	A-17	
	FCH10A20	200	10.0	100	0.20	0.90	5.0	-40 to +150	3.00	1.75		
	FCH10A20V	200	10.0	100	0.20	0.90	5.0	-40 to +150	3.00	1.75	A-18	
	FCH20A20	200	20.0	120	0.20	0.90	10.0	-40 to +150	1.50	1.75	A-17	
	FCH20A20V	200	20.0	120	0.20	0.90	10.0	-40 to +150	1.50	1.75	A-18	
	FCH20AU20	200	20.0	100	0.20	1.05	10.0	-40 to +150	3.00	1.75	A-17	
	FCH20AU20V	200	20.0	100	0.20	1.05	10.0	-40 to +150	3.00	1.75	A-18	
FRH20A10	100	20.0	180	1.00	0.88	10.0	-40 to +150	1.50	1.75	A-17	G	
FRH08A15	150	8.0	125	1.00	0.90	4.0	-40 to +150	3.00	1.75			
FRH10A15	150	10.0	130	1.00	0.88	5.0	-40 to +150	3.00	1.75			
FRH20A15	150	20.0	180	1.00	0.90	10.0	-40 to +150	1.50	1.75			
FRH10A20	200	10.0	100	0.20	0.90	5.0	-40 to +150	3.00	1.75			
FRH20A20	200	20.0	120	0.20	0.90	10.0	-40 to +150	1.50	1.75			
TO-262	TCH20A15-11A	150	20.0	180	1.00	0.90	10.0	-40 to +150	1.50	1.45	A-20	B
	TCH30A15-11A	150	30.0	250	2.00	0.91	15.0	-40 to +150	1.50	1.45		
TO-263LP	UCHS10A065	65	10.0	120	0.10	0.63	5.0	-40 to +150	2.00	0.59	A-22	E
	UCHS10A08	80	10.0	120	0.10	0.69	5.0	-40 to +150	2.00	0.59		
	UCHS20A08	80	20.0	220	0.15	0.71	10.0	-40 to +150	2.00	0.59		
	UCHS30A08	80	30.0	250	0.10	0.79	15.0	-40 to +150	1.50	0.59		
	UCHS10A12	120	10.0	120	0.10	0.84	5.0	-40 to +150	2.00	0.59		
	UCHS20A12	120	20.0	220	0.10	0.87	10.0	-40 to +150	2.00	0.59		
	UCHS30A12	120	30.0	250	0.10	0.90	15.0	-40 to +150	1.50	0.59		
TO-247	KCH60A03L	30	60.0	400	2.00	0.59	30.0	-40 to +150	1.00	5.55	A-24	B
	KCH60A04	40	60.0	400	2.00	0.63	30.0	-40 to +150	1.00	5.55		
	KCH30A06	60	30.0	200	1.00	0.69	15.0	-40 to +150	1.50	5.55		
	KCH20A10	100	20.0	180	1.00	0.88	10.0	-40 to +150	1.50	5.55		
	KCH30A10	100	30.0	250	2.00	0.88	15.0	-40 to +150	1.30	5.55		
	KCH30A15	150	30.0	250	2.00	0.91	15.0	-40 to +150	1.30	5.55		
	KCH20A20	200	20.0	120	0.20	0.90	10.0	-40 to +150	1.50	5.55		
	KCH30A20	200	30.0	150	0.30	0.92	15.0	-40 to +150	1.30	5.55		

* : 詳細な測定条件は、別途仕様書のご確認をお願い致します。 * : For more specific condition of measurement, please check data sheet.

3-1-3. ショットキーバリアダイオードG シリーズ〈超低リーク品〉（複合） Schottky Barrier Diodes G-Series <Ultra-Low-IR type> (Multi chip)

Outline	Parts No.	V_{RRM} [V]	I_o [A]	I_{FSM} [A]	I_R [mA]	V_{FM} [V]	@ I_{FM} [A]	T_{jw}, T_{slg} [°C]	$R_{th(j-c)}$ [°C/W]	Weight [g]	Outline No.	Connection type
TO-220 Full-Mold	FCGS10A12	120	10.0	120	0.01	0.82	5.0	-40 to +150	3.00	1.75	A-17	E
	FCGS10AU12	120	10.0	75	0.01	0.86	5.0	-55 to +175	3.00	1.75		
	FCGS20A12	120	20.0	180	0.01	0.84	10.0	-40 to +150	2.00	1.75		
	FCGS20BU12	120	20.0	130	0.01	0.89	10.0	-55 to +175	3.00	1.75		
	FCGS30AU12	120	30.0	180	0.01	0.90	15.0	-55 to +175	2.00	1.75		
	FCG10AU15	150	10.0	120	0.01	0.86	5.0	-55 to +175	3.00	1.75		
	FCG20BU15	150	20.0	130	0.01	0.88	10.0	-55 to +175	3.00	1.75		
	FCG30AU15	150	30.0	210	0.01	0.87	15.0	-55 to +175	2.00	1.75		
	FCG30AU15V	150	30.0	210	0.01	0.87	15.0	-55 to +175	2.00	1.75	A-18	
	FRG20BU15	150	20.0	130	0.01	0.88	10.0	-55 to +175	3.00	1.75	A-17	G

* : 詳細な測定条件は、別途仕様書のご確認をお願い致します。 * : For more specific condition of measurement, please check data sheet.

3-1-4. アバランシェ保証型ショットキーバリアダイオード Avalanche Guaranteed Schottky Barrier Diode

Outline	Parts No.	V_{RRM} [V]	I_o [A]	I_{FSM} [A]	I_R [mA]	V_{FM} [V]	@ I_{FM} [A]	T_{jw}, T_{slg} [°C]	$R_{th(j-c)}$ [°C/W]	Weight [g]	Outline No.	Connection type
TO-263LP	UCHD30A09	90	30.0	250	0.10	0.79	15.0	-40 to +150	1.50	0.59	A-22	E

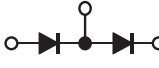
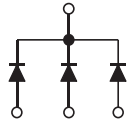
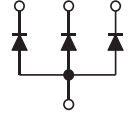
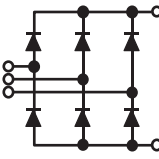
3. 定格・特性表 Specifications

3-2. モジュール製品 Module Products

3-2-1. 一般整流ダイオードモジュール (1/2) Rectifier Diode Modules (1/2)

Series	Circuit	Type No.	V_{RRM} [V]	I_o [A]	I_{FSM} [A]	T_{jw} [°C]	Weight [g]	Outline No.	Safety STD UL
PH		PH1508	800	150	3200	-40 to +150	220	E-1	○
		PH2508	800	250	5000	-40 to +150	220	E-1	○
		PH400N8	800	400	8000	-40 to +150	480	E-35	○
		PH400N16	1600	400	7200	-40 to +125	480	E-35	○
PC		PC308	800	30	600	-40 to +150	155	E-2	○
		PC608	800	60	1200	-40 to +150	155	E-2	○
		PC1008	800	100	2000	-40 to +150	155	E-2	○
		PC1508	800	150	3200	-40 to +150	480	E-4	○
		PC2008	800	200	4000	-40 to +150	480	E-4	○
		PC2508	800	250	5000	-40 to +150	530	E-4	○
		PC400N8	800	400	8000	-40 to +150	960	E-34	○
		PC3016	1600	30	600	-40 to +125	155	E-3	○
		PC6016	1600	60	1200	-40 to +125	155	E-3	○
		PC10016	1600	100	2000	-40 to +125	155	E-3	○
		PC15016	1600	150	3200	-40 to +125	480	E-4	○
		PC20016	1600	200	4000	-40 to +125	480	E-4	○
		PC25016	1600	250	5000	-40 to +125	530	E-4	○
		PC400N16	1600	400	7200	-40 to +125	960	E-34	○
PD		PD308	800	30	600	-40 to +150	155	E-2	○
		PD30KN8	800	30	600	-40 to +150	100	E-60	○
		PD608	800	60	1200	-40 to +150	155	E-2	○
		PD60KN8	800	60	1200	-40 to +150	100	E-60	○
		PD100N8C	800	100	2000	-40 to +150	125	E-65	○
		PD100KN8	800	100	2000	-40 to +150	100	E-60	○
		PD1508	800	150	3200	-40 to +150	480	E-5	○
		PD1518	800	150	3200	-40 to +150	280	E-44	○
		PD150S8	800	150	3200	-40 to +150	200	E-58	○
		PD150KN8	800	150	3200	-40 to +150	150	E-61	○
		PD2008	800	200	4000	-40 to +150	480	E-5	○
		PD2018	800	200	4000	-40 to +150	280	E-44	○
		PD200S8	800	200	4000	-40 to +150	200	E-58	○
		PD200KN8	800	200	4000	-40 to +150	150	E-61	○
		PD230S8	800	230	4500	-40 to +150	200	E-58	○
		PD2508	800	250	5000	-40 to +150	480	E-5	○
		PD250KN8A	800	250	4000	-40 to +150	150	E-61	○
		PD400N8	800	400	8000	-40 to +125	960	E-34	○
		PD3016	1600	30	600	-40 to +125	155	E-3	○
		PD30KN16	1600	30	600	-40 to +150	100	E-60	○
		PD6016	1600	60	1200	-40 to +125	155	E-3	○
		PD60KN16	1600	60	1200	-40 to +150	100	E-60	○
		PD100N16	1600	100	2000	-40 to +150	125	E-65	○
		PD100KN16	1600	100	2000	-40 to +150	100	E-60	○
		PD100MYN16	1600	100	2000	-40 to +150	80	E-79	○
		PD15016	1600	150	3200	-40 to +125	480	E-5	○
		PD15116	1600	150	3200	-40 to +150	280	E-44	○
		PD15216	1600	150	3200	-40 to +150	125	E-65	○
		PD150S16	1600	150	3200	-40 to +150	200	E-58	○
		PD150KN16	1600	150	3200	-40 to +150	150	E-61	○
		PD20016	1600	200	4000	-40 to +125	480	E-5	○
		PD20116	1600	200	4500	-40 to +150	280	E-44	○
		PD200S16	1600	200	4500	-40 to +150	200	E-58	○
		PD200KN16	1600	200	4500	-40 to +150	150	E-61	○
		PD200MYN16	1600	200	5000	-40 to +150	150	E-80	○
		PD230S16	1600	230	4500	-40 to +150	200	E-58	○

3-2-1. 一般整流ダイオードモジュール (2/2) Rectifier Diode Modules (2/2)

Series	Circuit	Type No.	V_{RRM} [V]	I_o [A]	I_{FSM} [A]	T_{jw} [°C]	Weight [g]	Outline No.	Safety STD UL
PD		PD25016	1600	250	5000	-40 to +125	480	E-5	○
		PD250KN16A	1600	250	4000	-40 to +150	150	E-61	○
		PD260MYN16	1600	260	7600	-40 to +150	400	E-81	○
		PD380MYN16	1600	380	7600	-40 to +150	400	E-81	○
		PD400N16	1600	400	7200	-40 to +125	960	E-34	○
		PD700MYN16	1600	700	13000	-40 to +150	640	E-82	○
		PD100MYN18	1800	100	2000	-40 to +150	80	E-79	○
		PD200MYN18	1800	200	5000	-40 to +150	150	E-80	○
		PD260MYN18	1800	260	7600	-40 to +150	400	E-81	○
		PD380MYN18	1800	380	7600	-40 to +150	400	E-81	○
		PD700MYN18	1800	700	13000	-40 to +150	640	E-82	○
PR		PR250KN8N	800	250	4500	-40 to +150	150	E-73	
PE		PE30SN8	800	30	600	-40 to +150	180	E-64	
		PE1008N	800	100	2000	-40 to +150	155	E-2	○
		PE100SN8	800	100	2000	-40 to +150	180	E-64	○
		PE1508N	800	150	3200	-40 to +150	315	E-6	○
		PE30SN16	1600	30	600	-40 to +150	180	E-64	
PF		PF30SN8	800	30	600	-40 to +150	180	E-64	
		PF1008N	800	100	2000	-40 to +150	155	E-2	○
		PF100SN8	800	100	2000	-40 to +150	180	E-64	○
		PF30SN16	1600	30	600	-40 to +150	180	E-64	
PT		PT50SN8	800	50	450	-40 to +150	180	E-64	○
		PT50KN8	800	50	400	-40 to +150	140	E-62	○
		PT76SN8	800	75	600	-40 to +150	180	E-64	○
		PT75KN8	800	75	600	-40 to +150	140	E-62	○
		PT100SN8	800	100	1000	-40 to +150	180	E-64	○
		PT100KN8	800	100	1000	-40 to +150	140	E-62	○
		PT151S8	800	150	1200	-40 to +150	180	E-17	○
		PT150N8	800	150	1200	-40 to +150	280	E-18	○
		PT150KN8	800	150	1200	-40 to +150	210	E-63	○
		PT200N8	800	200	2000	-40 to +150	280	E-18	○
		PT200KN8	800	200	2000	-40 to +150	210	E-63	○
		PT300S8	800	300	1800	-40 to +150	370	E-51	○
		PT50SN16	1600	50	450	-40 to +150	180	E-64	○
		PT50KN16	1600	50	400	-40 to +150	140	E-62	○
		PT76SN16	1600	75	600	-40 to +150	180	E-64	○
		PT75KN16	1600	75	600	-40 to +150	140	E-62	○
		PT80MYN16	1600	80	800	-40 to +150	130	E-77	○
		PT100SN16	1600	100	800	-40 to +150	180	E-64	○
		PT100KN16	1600	100	1200	-40 to +150	210	E-63	○
		PT150N16	1600	150	1200	-40 to +150	280	E-18	○
		PT150KN16	1600	150	1200	-40 to +150	210	E-63	○
		PT150MYN16	1600	150	1500	-40 to +150	250	E-78	○
		PT200N16	1600	200	2000	-40 to +150	280	E-18	○
		PT200KN16	1600	200	2000	-40 to +150	210	E-63	○
		PT200MYN16	1600	200	2000	-40 to +150	250	E-78	○
		PT300S16	1600	300	1850	-40 to +150	370	E-51	○
		PT80MYN18	1800	80	800	-40 to +150	130	E-77	○
		PT150MYN18	1800	150	1500	-40 to +150	250	E-78	○
		PT200MYN18	1800	200	2000	-40 to +150	250	E-78	○

3. 定格・特性表 Specifications

3-2-2. ファストリカバリダイオードモジュール Fast Recovery Diode Modules

Series	Circuit	Type No.	V_{RRM} [V]	I_o [A]	I_{FSM} [A]	V_{FM} [V]	t_{rr} [ns]	T_{jw} [°C]	Weight [g]	Outline No.	Safety STD UL
PH-F		PH270F2	200	270	3000	0.97	150	-40 to +150	280	E-24	
		PH300F6	600	300	3000	1.5	170	-40 to +150	280	E-24	
PC-F		PC50F2	200	50	800	1	80	-40 to +150	105	E-10	○
		PC100F2	200	100	1800	1	90	-40 to +150	205	E-11	○
		PC50F4	400	50	800	1.2	80	-40 to +150	105	E-10	○
		PC201FKN6	600	200	2000	1.4	110	-40 to +150	150	E-61	
		PC300FN6	600	300	3000	1.5	170	-40 to +150	225	E-75	○
PD-F		PD50F2	200	50	800	1	80	-40 to +150	105	E-10	○
		PD100F2	200	100	1800	1	90	-40 to +150	205	E-11	○
		PD50F4	400	50	800	1.2	80	-40 to +150	105	E-10	○
		PD201FKN6	600	200	2000	1.4	110	-40 to +150	150	E-61	
P2H-F		P2H30F2	200	30	300	1.08	50	-40 to +150	35	E-38	
		P2H60F2	200	60	600	1.08	50	-40 to +150	35	E-38	
		P2H80F2	200	80	800	1.05	50	-40 to +150	35	E-38	
		P2H30F4	400	30	300	1.33	60	-40 to +150	35	E-38	
		P2H60F4	400	60	600	1.33	60	-40 to +150	35	E-38	
		P2H80F4	400	80	800	1.31	60	-40 to +150	35	E-38	
		P2H50F12	1200	50	450	2.2	300	-40 to +150	35	E-38	○

3-2-3. ショットキーバリアダイオードモジュール Schottky Barrier Diode Modules

Series	Circuit	Type No.	V_{RRM} [V]	I_o [A]	I_{FSM} [A]	V_{FM} [V]	T_{jw} [°C]	Weight [g]	Outline No.	Safety STD UL
PC-Q		PC60QL03N	30	60	800	0.5	-40 to +125	65	E-12	○
		PC80QL03N	30	80	1600	0.46	-40 to +125	65	E-12	○
		PC60Q04N	40	60	800	0.58	-40 to +125	65	E-12	○
		PC80Q04N	40	80	1600	0.52	-40 to +125	65	E-12	○
PE-Q		PE80QL03N	30	80	1600	0.46	-40 to +150	70	E-13	○
PQ-Q		PQ160QH04N	40	160	2800	0.58	-40 to +150	250	E-14	
		PQ160QH06N	60	160	2800	0.62	-40 to +150	250	E-14	
P2H-Q		P2H30QH10	100	30	150	1.00	-40 to +150	35	E-38	
		P2H60QH10	100	60	300	1.00	-40 to +150	35	E-38	
		P2H80QH10	100	80	400	0.97	-40 to +150	35	E-38	
		P2H30QH15	150	30	150	1.05	-40 to +150	35	E-38	
		P2H60QH15	150	60	300	1.05	-40 to +150	35	E-38	
		P2H80QH15	150	80	400	1.02	-40 to +150	35	E-38	
		P2H30QH20	200	30	300	1.09	-40 to +150	35	E-38	
		P2H60QH20	200	60	600	1.09	-40 to +150	35	E-38	
		P2H80QH20	200	80	800	1.05	-40 to +150	35	E-38	

PC-Q、PE-Q、PQ-Q 型は非絶縁型です。（P2H は絶縁型） PC-Q, PE-Q, PQ-Q is non-isolated type. (P2H is isolated type)

アバランシェ保証型ショットキーバリアダイオードモジュール Avalanche Guaranteed Schottky Barrier Diode Modules

Series	Circuit	Type No.	V_{RRM} [V]	I_o [A]	I_{FSM} [A]	V_{FM} [V]	T_{jw} [°C]	Weight [g]	Outline No.	Safety STD UL
MR		MR80QZ09N	90	80	-	0.98	-40 to +150	25	E-70	-
		MR80QZ12N	120	80	-	0.98	-40 to +150	25	E-70	-

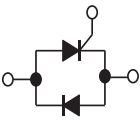
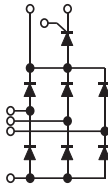
PC-Q、PE-Q、PQ-Q 型は非絶縁型です。（P2H は絶縁型） PC-Q, PE-Q, PQ-Q is non-isolated type. (P2H is isolated type)

3-2-4. サイリスタモジュール (1/2) Thyristor Modules (1/2)

Series	Circuit	Type No.	V_{DRM} V_{RRM} [V]	I_o [A]	I_{TSM} [A]	I_{GT} [mA]	V_{GT} [V]	T_{jw} [°C]	Weight [g]	Outline No.	Safety STD UL
PHT		PHT308C	800	30	500	100	2.5	-40 to +125	35	E-38	
		PHT608C	800	60	600	100	2.5	-40 to +125	35	E-38	
		PHT250N8	800	250	4000	150	3.0	-40 to +125	250	E-42	○
		PHT400N8	800	400	7500	150	3.0	-40 to +125	480	E-35	○
		PHT250N16	1600	250	4000	150	3.0	-40 to +125	250	E-42	○
		PHT400N16	1600	400	7200	150	3.0	-40 to +125	480	E-35	○
PDT		PDT308	800	30	600	100	2.5	-40 to +125	155	E-2	○
		PDT608	800	60	1200	100	2.5	-40 to +125	155	E-2	○
		PDT1008	800	100	2000	100	2.5	-40 to +125	155	E-2	○
		PDT1508	800	150	3200	150	3.0	-40 to +125	480	E-5	○
		PDT1518	800	150	3200	150	3.0	-40 to +125	280	E-44	○
		PDT2008	800	200	4000	150	3.0	-40 to +125	480	E-5	○
		PDT2018	800	200	4000	150	3.0	-40 to +125	280	E-44	○
		PDT400N8	800	400	7500	150	3.0	-40 to +125	960	E-34	○
		PDT3016	1600	30	600	100	2.5	-40 to +125	155	E-3	○
		PDT6016	1600	60	1200	100	2.5	-40 to +125	155	E-3	○
		PDT10016	1600	100	2000	100	2.5	-40 to +125	155	E-3	○
		PDT15016	1600	150	3200	150	3.0	-40 to +125	480	E-5	○
		PDT15116	1600	150	3200	150	3.0	-40 to +125	280	E-44	○
		PDT20016	1600	200	4000	150	3.0	-40 to +125	480	E-5	○
		PDT20116	1600	200	4000	150	3.0	-40 to +125	280	E-44	○
		PDT25016	1600	250	4000	150	3.0	-40 to +125	480	E-5	
		PDT400N16	1600	400	7200	150	3.0	-40 to +125	960	E-34	○
		PDT400G16W	1600	400	8000	150	3.0	-40 to +125	1200	E-67	
PAT		PAT308	800	30	600	100	2.5	-40 to +125	155	E-2	○
		PAT608	800	60	1200	100	2.5	-40 to +125	155	E-2	○
		PAT1008	800	100	2000	100	2.5	-40 to +125	155	E-2	○
		PAT1508	800	150	3200	150	3.0	-40 to +125	500	E-37	○
		PAT2008	800	200	4000	150	3.0	-40 to +125	500	E-37	○
		PAT400N8	800	400	7500	150	3.0	-40 to +125	960	E-34	○
		PAT3016	1600	30	600	100	2.5	-40 to +125	155	E-3	○
		PAT6016	1600	60	1200	100	2.5	-40 to +125	155	E-3	○
		PAT10016	1600	100	2000	100	2.5	-40 to +125	155	E-3	○
		PAT15016	1600	150	3200	150	3.0	-40 to +125	500	E-37	○
		PAT20016	1600	200	4000	150	3.0	-40 to +125	500	E-37	○
		PAT400N16	1600	400	7200	150	3.0	-40 to +125	960	E-34	○
PAH		PAH308	800	30	600	100	2.5	-40 to +125	155	E-2	○
		PAH30N8CM	800	30	600	100	2.5	-40 to +125	150	E-66	○
		PAH608	800	60	1200	100	2.5	-40 to +125	155	E-2	○
		PAH60N8CM	800	60	1200	100	2.5	-40 to +125	150	E-66	○
		PAH60LN8	800	60	1200	100	2.5	-40 to +150	70	E-71	○
		PAH1008	800	100	2000	100	2.5	-40 to +125	155	E-2	○
		PAH100N8CM	800	100	2000	100	2.5	-40 to +125	150	E-66	○
		PAH100LN8	800	100	2000	100	2.5	-40 to +150	70	E-71	○
		PAH1508	800	150	3200	150	3.0	-40 to +125	500	E-37	○
		PAH2008	800	200	4000	150	3.0	-40 to +125	500	E-37	○
		PAH200N8	800	200	4000	150	3.0	-40 to +150	200	E-72	○
		PAH250N8	800	250	5000	150	3.0	-40 to +150	200	E-72	○
		PAH300N8	800	300	5000	150	3.0	-40 to +150	200	E-72	○
		PAH400N8	800	400	7500	150	3.0	-40 to +125	960	E-34	○

3. 定格・特性表 Specifications

3-2-4. サイリスタモジュール (2/2) Thyristor Modules (2/2)

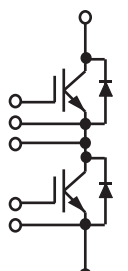
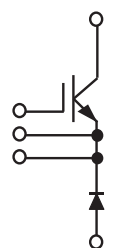
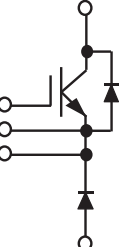
Series	Circuit	Type No.	V_{DRM} V_{RRM} [V]	I_o [A]	I_{TSM} [A]	I_{GT} [mA]	V_{GT} [V]	T_{jw} [°C]	Weight [g]	Outline No.	Safety STD UL
PAH		PAH3016	1600	30	600	100	2.5	-40 to +125	155	E-3	○
		PAH30N16CM	1600	30	600	100	2.5	-40 to +125	150	E-66	○
		PAH6016	1600	60	1200	100	2.5	-40 to +125	155	E-3	○
		PAH60N16CM	1600	60	1200	100	2.5	-40 to +125	150	E-66	○
		PAH60LN16	1600	60	1200	100	2.5	-40 to +150	70	E-71	○
		PAH10016	1600	100	2000	100	2.5	-40 to +125	155	E-3	○
		PAH100N16	1600	100	2000	100	2.5	-40 to +150	200	E-72	○
		PAH15016	1600	150	3200	150	3.0	-40 to +125	500	E-37	○
		PAH150N16	1600	150	3200	150	3.0	-40 to +150	200	E-72	○
		PAH20016	1600	200	4000	150	3.0	-40 to +125	500	E-37	○
		PAH400N16	1600	400	7200	150	3.0	-40 to +125	960	E-34	○
PCH		PCH308	800	30	600	100	2.5	-40 to +125	155	E-2	○
		PCH608	800	60	1200	100	2.5	-40 to +125	155	E-2	○
		PCH1008	800	100	2000	100	2.5	-40 to +125	155	E-2	○
		PCH1508	800	150	3200	150	3.0	-40 to +125	480	E-4	○
		PCH2008	800	200	4000	150	3.0	-40 to +125	480	E-4	○
		PCH400N8	800	400	7500	150	3.0	-40 to +125	960	E-34	○
		PCH3016	1600	30	600	100	2.5	-40 to +125	155	E-3	○
		PCH6016	1600	60	1200	100	2.5	-40 to +125	155	E-3	○
		PCH15016	1600	150	3200	150	3.0	-40 to +125	480	E-4	○
		PCH20016	1600	200	4000	150	3.0	-40 to +125	480	E-4	○
PDH		PDH308	800	30	600	100	2.5	-40 to +125	155	E-2	○
		PDH608	800	60	1200	100	2.5	-40 to +125	155	E-2	○
		PDH1008	800	100	2000	100	2.5	-40 to +125	155	E-2	○
		PDH1508	800	150	3200	150	3.0	-40 to +125	480	E-5	○
		PDH1518	800	150	3200	150	3.0	-40 to +125	280	E-44	○
		PDH2008	800	200	4000	150	3.0	-40 to +125	480	E-5	○
		PDH2018	800	200	4000	150	3.0	-40 to +125	280	E-44	○
		PDH400N8	800	400	7500	150	3.0	-40 to +125	960	E-34	○
		PDH3016	1600	30	600	100	2.5	-40 to +125	155	E-3	○
		PDH6016	1600	60	1200	100	2.5	-40 to +125	155	E-3	○
		PDH10016	1600	100	2000	100	2.5	-40 to +125	155	E-3	○
		PDH15016	1600	150	3200	150	3.0	-40 to +125	480	E-5	○
		PDH15116	1600	150	3200	150	3.0	-40 to +125	280	E-44	○
		PDH20016	1600	200	4000	150	3.0	-40 to +125	480	E-5	○
		PDH20116	1600	200	4000	150	3.0	-40 to +125	280	E-44	○
		PDH400N16	1600	400	7200	150	3.0	-40 to +125	960	E-34	○
PGH		PGH50N8	800	50	1200	100	2.5	-40 to +150	225	E-68	○
		PGH75N8	800	75	1200	100	2.5	-40 to +150	225	E-68	○
		PGH100N8	800	100	2000	100	2.5	-40 to +150	225	E-68	○
		PGH101N8	800	100	2000	100	2.5	-40 to +150	225	E-68	○
		PGH150N8	800	150	3200	150	3.0	-40 to +150	450	E-69	○
		PGH200N8	800	200	4000	150	3.0	-40 to +150	450	E-69	○
		PGH50N16	1600	50	1200	100	2.5	-40 to +150	225	E-68	○
		PGH75N16	1600	75	1200	100	2.5	-40 to +150	225	E-68	○
		PGH100N16	1600	100	2000	100	2.5	-40 to +150	225	E-68	○
		PGH150N16	1600	150	3200	150	3.0	-40 to +150	450	E-69	○
		PGH200N16	1600	200	4000	150	3.0	-40 to +150	450	E-69	○
PFT		PFT2004N	400	200	4400	150	3.0	-40 to +150	480	E-6	○
		PFT2014N	400	200	5000	150	3.0	-40 to +150	280	E-44	
		PFT1506N	600	150	3200	100	2.5	-40 to +150	350	E-6	○

3-2-5. MOSFET モジュール MOSFET Modules (※生産中止予定 To be discontinued)

Series	Circuit	Type No.	V _{DSS} [V]	I _D [A]	MOSFET			Diode			MOSFET R _{thj-c} [°C/W]	FRD R _{thj-c} [°C/W]	Weight [g]	Outline No.	Safty STD UL
					R _{DS(on)} [Ω]	t _{on} (typ) [us]	t _{off} (typ) [us]	I _S [A]	V _{SD} [V]	t _{rr} (typ) [us]					
PDM-L		PD4M441L	450	30	0.210	0.160	0.230	21	2.0	0.750	0.56	0.56	220	E-21	○
		PD7M441L	450	50	0.120	0.200	0.290	35	2.0	0.900	0.36	0.36	220	E-21	○
		PD10M441L	450	70	0.085	0.250	0.350	50	2.0	1.100	0.25	0.25	220	E-21	○
		PD4M440L	500	30	0.210	0.160	0.230	21	2.0	0.750	0.56	0.56	220	E-21	○
		PD7M440L	500	50	0.120	0.200	0.290	35	2.0	0.900	0.36	0.36	220	E-21	○
		PD10M440L	500	70	0.085	0.250	0.350	50	2.0	1.100	0.25	0.25	220	E-21	○
PDM-H		PD4M441H	450	30	0.210	0.160	0.230	21	1.8	0.100	0.56	2.0	220	E-21	○
		PD7M441H	450	50	0.120	0.200	0.290	35	1.9	0.100	0.36	2.0	220	E-21	○
		PD10M441H	450	85	0.085	0.250	0.350	60	2.0	0.100	0.171	1.2	220	E-21	○
		PD4M440H	500	30	0.210	0.160	0.230	21	1.8	0.100	0.56	2.0	220	E-21	○
		PD7M440H	500	50	0.120	0.200	0.290	35	1.9	0.100	0.36	2.0	220	E-21	○
		PDM505HA	500	50	0.120	0.202	0.318	35	1.5	0.080	0.36	2.0	220	E-23	○
		PDM755HA	500	75	0.065	0.250	0.440	53	1.8	0.070	0.25	1.2	220	E-23	○
		PD10M440H	500	85	0.085	0.250	0.350	60	2.0	0.100	0.171	1.2	220	E-21	○
		PDM1405HA	500	140	0.040	0.720	1.010	100	1.7	0.130	0.142	1.0	460	E-31	○
P2HM-L		P2H4M441L	450	30	0.210	0.160	0.230	21	2.0	0.750	0.56	0.56	220	E-22	○
		P2H7M441L	450	50	0.120	0.200	0.290	35	2.0	0.900	0.36	0.36	220	E-22	○
		P2H10M441L	450	70	0.085	0.250	0.350	50	2.0	1.100	0.25	0.25	220	E-22	○
		P2H4M440L	500	30	0.210	0.160	0.230	21	2.0	0.750	0.56	0.56	220	E-22	○
		P2H7M440L	500	50	0.120	0.200	0.290	35	2.0	0.900	0.36	0.36	220	E-22	○
		P2H10M440L	500	70	0.085	0.250	0.350	50	2.0	1.100	0.25	0.25	220	E-22	○
P2HM-H		P2H4M441H	450	30	0.210	0.160	0.230	21	1.8	0.100	0.56	2.0	220	E-22	○
		P2H7M441H	450	50	0.120	0.200	0.290	35	1.9	0.100	0.36	2.0	220	E-22	○
		P2H10M441H	450	85	0.085	0.250	0.350	60	2.0	0.100	0.171	1.2	220	E-22	○
		P2H4M440H	500	30	0.210	0.160	0.230	21	1.8	0.100	0.56	2.0	220	E-22	○
		P2H7M440H	500	50	0.120	0.200	0.290	35	1.9	0.100	0.36	2.0	220	E-22	○
		P2HM505HA	500	50	0.120	0.202	0.318	35	1.5	0.080	0.36	2.0	220	E-22	○
		P2HM755HA	500	75	0.065	0.250	0.440	53	1.8	0.070	0.25	2.0	220	E-22	○
		P2H10M440H	500	85	0.085	0.250	0.350	60	2.0	0.100	0.171	1.2	220	E-22	○

3. 定格・特性表 Specifications

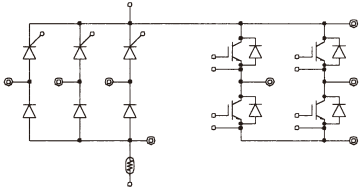
3-2-6. IGBT モジュール (1/2) IGBT Modules (1/2)

Series	Circuit	Type No.	V _{CES} [V]	I _C [A]	V _{CE} (sat)(typ) [V]	t _{on} (typ) [us]	t _{off} (typ) [us]	Diode			IGBT R _{thj-c} (Max.) [°C/W]	FRD R _{thj-c} (Max.) [°C/W]	Weight [g]	Outline No.	Safty STD UL
								I _F [A]	V _F (typ) [V]	t _{rr} (typ) [us]					
PHMB		PHMB50W12CL	1200	50	1.50	0.170	0.680	-	-	-	0.540	-	35	E-38	○
PDMB		PDMB50W6	650	50	1.45	0.212	0.419	50	1.70	0.140	0.690	1.660	150	E-74	○
		PDMB75W6	650	75	1.45	0.201	0.399	75	1.70	0.140	0.490	1.300	150	E-74	○
		PDMB100W6	650	100	1.45	0.189	0.380	100	1.70	0.140	0.390	0.960	150	E-74	○
		PDMB150W6	650	150	1.45	0.190	0.370	150	1.70	0.140	0.280	0.670	150	E-74	○
		PDMB200W6	650	200	1.45	0.176	0.358	200	1.70	0.145	0.210	0.480	150	E-74	○
		PDMB300W6	650	300	1.45	0.310	0.495	300	1.70	0.175	0.130	0.330	225	E-75	○
		PDMB400W6	650	400	1.45	0.315	0.580	400	1.70	0.185	0.110	0.240	225	E-75	○
		PDMB50W12	1200	50	1.50	0.170	0.680	50	2.00	0.130	0.540	0.970	150	E-74	○
		PDMB75W12	1200	75	1.50	0.170	0.680	75	2.00	0.150	0.430	0.800	150	E-74	○
		PDMB100W12	1200	100	1.50	0.170	0.690	100	2.00	0.170	0.310	0.720	150	E-74	○
		PDMB150W12	1200	150	1.50	0.170	0.700	150	2.00	0.190	0.190	0.300	225	E-75	○
		PDMB200W12	1200	200	1.50	0.170	0.700	200	2.00	0.200	0.130	0.210	225	E-75	○
		PDMB300W12	1200	300	1.50	0.310	1.090	300	2.00	0.250	0.095	0.150	450	E-56	○
		PDMB400W12	1200	400	1.50	0.310	1.090	400	2.00	0.250	0.065	0.105	450	E-56	○
PCHMB		PCHMB50W6	650	50	1.45	0.212	0.419	50	1.70	0.140	0.690	1.660	150	E-74	○
		PCHMB75W6	650	75	1.45	0.201	0.399	75	1.70	0.140	0.490	1.300	150	E-74	○
		PCHMB100W6	650	100	1.45	0.189	0.380	100	1.70	0.140	0.390	0.960	150	E-74	○
		PCHMB150W6	650	150	1.45	0.190	0.370	150	1.70	0.140	0.280	0.670	150	E-74	○
		PCHMB200W6	650	200	1.45	0.176	0.358	200	1.70	0.145	0.210	0.480	150	E-74	○
		PCHMB300W6	650	300	1.45	0.310	0.495	300	1.70	0.175	0.130	0.330	225	E-75	○
		PCHMB400W6	650	400	1.45	0.315	0.580	400	1.70	0.185	0.110	0.240	225	E-75	○
		PCHMB50W12	1200	50	1.50	0.170	0.680	50	2.00	0.130	0.540	0.970	150	E-74	○
		PCHMB75W12	1200	75	1.50	0.170	0.680	75	2.00	0.150	0.430	0.800	150	E-74	○
		PCHMB100W12	1200	100	1.50	0.170	0.690	100	2.00	0.170	0.310	0.720	150	E-74	○
		PCHMB150W12	1200	150	1.50	0.170	0.700	150	2.00	0.190	0.190	0.300	225	E-75	○
		PCHMB200W12	1200	200	1.50	0.170	0.700	200	2.00	0.200	0.130	0.210	225	E-75	○
		PCHMB300W12	1200	300	1.50	0.310	1.090	300	2.00	0.250	0.095	0.150	450	E-56	○
		PCHMB400W12	1200	400	1.50	0.310	1.090	400	2.00	0.250	0.065	0.105	450	E-56	○
PCFMB		PCFMB50W6	650	50	1.45	0.212	0.419	50	1.70	0.140	0.690	1.660	150	E-74	○
		PCFMB75W6	650	75	1.45	0.201	0.399	75	1.70	0.140	0.490	1.300	150	E-74	○
		PCFMB100W6	650	100	1.45	0.189	0.380	100	1.70	0.140	0.390	0.960	150	E-74	○
		PCFMB150W6	650	150	1.45	0.190	0.370	150	1.70	0.140	0.280	0.670	150	E-74	○
		PCFMB200W6	650	200	1.45	0.176	0.358	200	1.70	0.145	0.210	0.480	150	E-74	○
		PCFMB300W6	650	300	1.45	0.310	0.495	300	1.70	0.175	0.130	0.330	225	E-75	○
		PCFMB400W6	650	400	1.45	0.315	0.580	400	1.70	0.185	0.110	0.240	225	E-75	○
		PCFMB50W12	1200	50	1.50	0.170	0.680	50	2.00	0.130	0.540	0.970	150	E-74	○
		PCFMB75W12	1200	75	1.50	0.170	0.680	75	2.00	0.150	0.430	0.800	150	E-74	○
		PCFMB100W12	1200	100	1.50	0.170	0.690	100	2.00	0.170	0.310	0.720	150	E-74	○
		PCFMB150W12	1200	150	1.50	0.170	0.700	150	2.00	0.190	0.190	0.300	225	E-75	○
		PCFMB200W12	1200	200	1.50	0.170	0.700	200	2.00	0.200	0.130	0.210	225	E-75	○
		PCFMB300W12	1200	300	1.50	0.310	1.090	300	2.00	0.250	0.095	0.150	450	E-56	○
		PCFMB400W12	1200	400	1.50	0.310	1.090	400	2.00	0.250	0.065	0.105	450	E-56	○

3-2-6. IGBT モジュール (2/2) IGBT Modules (2/2)

Series	Circuit	Type No.	V_{CES} [V]	I_C [A]	V_{CE} (sat)(typ) [V]	$t_{on}(typ)$ [μ s]	$t_{off}(typ)$ [μ s]	Diode			IGBT $R_{thjc}(Max.)$ [$^{\circ}$ C/W]	FRD $R_{thjc}(Max.)$ [$^{\circ}$ C/W]	Weight [g]	Outline No.	Safty STD UL
								I_F [A]	$V_F(yp)$ [V]	$t_r(yp)$ [μ s]					
PRHMB		PRHMB50W6	650	50	1.45	0.212	0.419	50	1.70	0.140	0.690	1.660	150	E-74	○
		PRHMB75W6	650	75	1.45	0.201	0.399	75	1.70	0.140	0.490	1.300	150	E-74	○
		PRHMB100W6	650	100	1.45	0.189	0.380	100	1.70	0.140	0.390	0.960	150	E-74	○
		PRHMB150W6	650	150	1.45	0.190	0.370	150	1.70	0.140	0.280	0.670	150	E-74	○
		PRHMB200W6	650	200	1.45	0.176	0.358	200	1.70	0.145	0.210	0.480	150	E-74	○
		PRHMB300W6	650	300	1.45	0.310	0.495	300	1.70	0.175	0.130	0.330	225	E-75	○
		PRHMB400W6	650	400	1.45	0.315	0.580	400	1.70	0.185	0.110	0.240	225	E-75	○
		PRHMB50W12	1200	50	1.50	0.170	0.680	50	2.00	0.130	0.540	0.970	150	E-74	○
		PRHMB75W12	1200	75	1.50	0.170	0.680	75	2.00	0.150	0.430	0.800	150	E-74	○
		PRHMB100W12	1200	100	1.50	0.170	0.690	100	2.00	0.170	0.310	0.720	150	E-74	○
		PRHMB150W12	1200	150	1.50	0.170	0.700	150	2.00	0.190	0.190	0.300	225	E-75	○
		PRHMB200W12	1200	200	1.50	0.170	0.700	200	2.00	0.200	0.130	0.210	225	E-75	○
		PRHMB300W12	1200	300	1.50	0.310	1.090	300	2.00	0.250	0.095	0.150	450	E-56	○
		PRHMB400W12	1200	400	1.50	0.310	1.090	400	2.00	0.250	0.065	0.105	450	E-56	○
PRFMB		PRFMB50W6	650	50	1.45	0.212	0.419	50	1.70	0.140	0.690	1.660	150	E-74	○
		PRFMB75W6	650	75	1.45	0.201	0.399	75	1.70	0.140	0.490	1.300	150	E-74	○
		PRFMB100W6	650	100	1.45	0.189	0.380	100	1.70	0.140	0.390	0.960	150	E-74	○
		PRFMB150W6	650	150	1.45	0.190	0.370	150	1.70	0.140	0.280	0.670	150	E-74	○
		PRFMB200W6	650	200	1.45	0.176	0.358	200	1.70	0.145	0.210	0.480	150	E-74	○
		PRFMB300W6	650	300	1.45	0.310	0.495	300	1.70	0.175	0.130	0.330	225	E-75	○
		PRFMB400W6	650	400	1.45	0.315	0.580	400	1.70	0.185	0.110	0.240	225	E-75	○
		PRFMB50W12	1200	50	1.50	0.170	0.680	50	2.00	0.130	0.540	0.970	150	E-74	○
		PRFMB75W12	1200	75	1.50	0.170	0.680	75	2.00	0.150	0.430	0.800	150	E-74	○
		PRFMB100W12	1200	100	1.50	0.170	0.690	100	2.00	0.170	0.310	0.720	150	E-74	○
		PRFMB150W12	1200	150	1.50	0.170	0.700	150	2.00	0.190	0.190	0.300	225	E-75	○
		PRFMB200W12	1200	200	1.50	0.170	0.700	200	2.00	0.200	0.130	0.210	225	E-75	○
		PRFMB300W12	1200	300	1.50	0.310	1.090	300	2.00	0.250	0.095	0.150	450	E-56	○
		PRFMB400W12	1200	400	1.50	0.310	1.090	400	2.00	0.250	0.065	0.105	450	E-56	○

3-2-7. パワーインテグレートッドモジュール Power Integrated Modules

Series	Type No.	Built in Function	Maximum Ratings				Electrical Characteristics					Weight [g]	Outline No.	Safty STD UL
			Inverter		Brake	Converter	Inverter				Brake			
			V _{CES} [V]	I _C [A]	I _C [A]	I _o [A]	V _{CE(sat)}	t _{on} [us]	t _{off} [us]	V _F [V]	V _{CE(sat)}			
PVD	PVD30E8	三相サイリスタ ダイオード混合ブリッジ 単相 IGBT インバータ サーミスタ	600	50	-	30	2.5	0.4	0.7	2.4	-	190	E-46	
														

3. 定格・特性表 Specifications

3-2-8. ソリッドステートリレー Solid State Relays (SSR)

AC リレー / 非ゼロ電圧スイッチング AC Relays/Non Zero-Cross Switching Type

シングルインライン型・L シリーズ SIP Type・L-Series

Type No.	V _{AC} V _{RMS}	V _{DRM} V _{PEAK}	V _{opr} V _{RMS}	I _L A _{RMS}	I _{SM} A _{PEAK}	I _{OM} mA _{RMS}	V _{ISO} V _{RMS}	V _{IN2} V _{DC}	R _{IN} [Ω]	Topr [°C]	Tstg [°C]	Weight [g]	Outline No.	Safety Standard		
														UL	CSA	TÜV
D2N201LD	240	600	60 to 280	1	10	20	1500 ※ 1	3 to 6	180	-20 to +80	-25 to +85	10	C-2	○	○	○
D2N201LE	240	600	60 to 280	1	10	20	1500 ※ 1	7 to 14	750	-20 to +80	-25 to +85	10	C-2	○	○	○
D2N201LF	240	600	60 to 280	1	10	20	1500 ※ 1	10 to 18	1,200	-20 to +80	-25 to +85	10	C-2	○	○	○
D2N201LG	240	600	60 to 280	1	10	20	1500 ※ 1	18 to 30	2,150	-20 to +80	-25 to +85	10	C-2	○	○	○
D2N202LD	240	600	60 to 280	2	20	20	1500 ※ 1	3 to 6	180	-20 to +80	-25 to +85	10	C-2	○	○	○
D2N202LE	240	600	60 to 280	2	20	20	1500 ※ 1	7 to 14	750	-20 to +80	-25 to +85	10	C-2	○	○	○
D2N202LF	240	600	60 to 280	2	20	20	1500 ※ 1	10 to 18	1,200	-20 to +80	-25 to +85	10	C-2	○	○	○
D2N202LG	240	600	60 to 280	2	20	20	1500 ※ 1	18 to 30	2,150	-20 to +80	-25 to +85	10	C-2	○	○	○
D2N203LD	240	600	60 to 280	3	30	20	1500 ※ 1	3 to 6	180	-20 to +80	-25 to +85	10	C-2	○	○	○
D2N203LE	240	600	60 to 280	3	30	20	1500 ※ 1	7 to 14	750	-20 to +80	-25 to +85	10	C-2	○	○	○
D2N203LF	240	600	60 to 280	3	30	20	1500 ※ 1	10 to 18	1,200	-20 to +80	-25 to +85	10	C-2	○	○	○
D2N203LG	240	600	60 to 280	3	30	20	1500 ※ 1	18 to 30	2,150	-20 to +80	-25 to +85	10	C-2	○	○	○

注 1. ※ 1: 定格基準電圧 240V の製品には絶縁耐圧 4,000V の強化絶縁型があります。その場合には型名末尾に数字 18 が付記されます。

例: D2N201LD 型の強化絶縁型型名→ D2N201LD18

4,000volts reinforced insulation type are available for all 240volts series, add suffix code "18" to standard type number.

(example "D2N201LD18")

DIN レール型・P シリーズ DIN Rail Mounting Type・P-Series

Type No.	V _{AC} V _{RMS}	V _{DRM} V _{PEAK}	V _{opr} V _{RMS}	I _L A _{RMS}	I _{SM} A _{PEAK}	I _{OM} mA _{RMS}	V _{ISO} V _{RMS}	V _{IN2} V _{DC}	Topr [°C]	Tstg [°C]	Weight [g]	Outline No.	Safety Standard		
													UL	CSA	TÜV
PHA15DW2RP	240	600	60 to 240	15	150	100	2,500	4.5 to 30	-30 to +80	-35 to +100	220	C-5	○	○	○
PHA25DW2RP	240	600	60 to 240	25	250	100	2,500	4.5 to 30	-30 to +80	-35 to +100	220	C-5	○	○	○
PHA35DW2RP	240	600	60 to 240	35	350	500	2,500	4.5 to 30	-30 to +80	-35 to +100	220	C-6	○	○	○
PHA45DW2RP	240	600	60 to 240	45	450	500	2,500	4.5 to 30	-30 to +80	-35 to +100	220	C-6	○	○	○

3-3. ハイパワー製品 Hi Power Products

3-3-1. 一般整流ダイオード Rectifier Diodes

中・大電力用（スタッド型・M シリーズ） Power Rectifier Diodes (Stud Type・M-Series)

Type No.	V _{RRM} [V]	V _{RSM} [V]	I _{F(RMS)} [A]	I _o [A]	I _{FSM} [A]	I ² t [A ² s]	I _{RM} [mA]	V _{FM} [V]	T _{JW} [°C]	T _{slg} [°C]	R _{th(j-c)} [°C/W]	Weight [g]	Torque [N・m] ※	Outline No.
61M100	1,000	1,200	94	60	1,000	5,000	10	1.3 (I _{FM} =180A)	-40 to +175	-40 to +175	0.5	21	2.9	B-3
61M160	1,600	1,800	94		1,000	5,000			-40 to +175	-40 to +175	0.5	21	2.4	
151M60	600	800	235	150 (T _C = 114°C)	3,000	45,000	20 (T _J = 175°C V _{RRM})	1.4 (I _{FM} =500A)	-40 to +175	-40 to +175	0.3	110	20 17	B-4
151M80	800	1,000	235		3,000	45,000			-40 to +175	-40 to +175	0.3	110		
151M100	1,000	1,200	235		3,000	45,000			-40 to +175	-40 to +175	0.3	110		
151M120	1,200	1,400	235		3,000	45,000			-40 to +175	-40 to +175	0.3	110		
151M140	1,400	1,600	235		3,000	45,000			-40 to +175	-40 to +175	0.3	110		
151M160	1,600	1,800	235		3,000	45,000			-40 to +175	-40 to +175	0.3	110		
251M60	600	800	390	250 (T _C = 105°C)	4,000	80,000	30 (T _J = 175°C V _{RRM})	1.5 (I _{FM} =500A)	-40 to +175	-40 to +175	0.2	220	28 22	B-6
251M80	800	1,000	390		4,000	80,000			-40 to +175	-40 to +175	0.2	220		
251M100	1,000	1,200	390		4,000	80,000			-40 to +175	-40 to +175	0.2	220		
251M120	1,200	1,400	390		4,000	80,000			-40 to +175	-40 to +175	0.2	220		
251M140	1,400	1,600	390		4,000	80,000			-40 to +175	-40 to +175	0.2	220		
251M160	1,600	1,800	390		4,000	80,000			-40 to +175	-40 to +175	0.2	220		

※ は推奨値 Recommended Value

中・大電力用（スタッド型・MA シリーズ） Power Rectifier Diodes (Stud Type・MA-Series)

Type No.	V _{RRM} [V]	V _{RSM} [V]	I _{F(RMS)} [A]	I _o [A]	I _{FSM} [A]	I ² t [A ² s]	I _{RM} [mA]	V _{FM} [V]	T _{JW} [°C]	T _{slg} [°C]	R _{th(j-c)} [°C/W]	Weight [g]	Torque [N・m] ※	Outline No.
15MA300	3,000	3,300	39	25	450	1,000	10	1.85 (I _{FM} =80A)	-40 to +150	-40 to +175	0.6	19	2.9	B-1
15MA400	4,000	4,400	39	25	450	1,000	10		-40 to +150	-40 to +175	0.6	19		
61MA100	1,000	1,200	94	60	1,000	5,000	10	1.3 (I _{FM} =180A)	-40 to +175	-40 to +175	0.5	21	2.4	B-3
61MA160	1,600	1,800	94	60	1,000	5,000	10		-40 to +175	-40 to +175	0.5	21		
45MA10	100	200	235	150	2,700	36,400	20	1.5 (I _{FM} =500A)	-60 to +150	-60 to +175	0.34	110	20.3 17	B-4
45MA20	200	300	235	150	2,700	36,400	20		-60 to +150	-60 to +175	0.34	110		
45MA40	400	600	235	150	2,700	36,400	20		-60 to +150	-60 to +175	0.34	110		
45MA60	600	800	235	150	2,700	36,400	20		-60 to +150	-60 to +175	0.34	110		
45MA80	800	1,000	235	150	2,700	36,400	20		-60 to +150	-60 to +175	0.34	110		
45MA100	1,000	1,200	235	150	2,700	36,400	20		-60 to +150	-60 to +175	0.34	110		
45MA120	1,200	1,400	235	150	2,700	36,400	20		-60 to +150	-60 to +175	0.34	110		
45MA140	1,400	1,600	235	150	2,700	36,400	20		-60 to +150	-60 to +175	0.34	110		
45MA160	1,600	1,800	235	150	2,700	36,400	20		-60 to +150	-60 to +175	0.34	110		
70MA10	100	200	390	250	4,000	80,000	20	1.5 (I _{FM} =800A)	-60 to +150	-60 to +175	0.24	220	28 22	B-6
70MA20	200	300	390	250	4,000	80,000	20		-60 to +150	-60 to +175	0.24	220		
70MA40	400	600	390	250	4,000	80,000	20		-60 to +150	-60 to +175	0.24	220		
70MA60	600	800	390	250	4,000	80,000	20		-60 to +150	-60 to +175	0.24	220		
70MA80	800	1,000	390	250	4,000	80,000	20		-60 to +150	-60 to +175	0.24	220		
70MA100	1,000	1,200	390	250	4,000	80,000	20		-60 to +150	-60 to +175	0.24	220		
70MA120	1,200	1,400	390	250	4,000	80,000	20		-60 to +150	-60 to +175	0.24	220		
70MA140	1,400	1,600	390	250	4,000	80,000	20		-60 to +150	-60 to +175	0.24	220		
70MA160	1,600	1,800	390	250	4,000	80,000	20		-60 to +150	-60 to +175	0.24	220		
250MA60	600	800	1,100	700	9,000	405,000	50	1.57 (I _{FM} =2,200A)	-40 to +175	-40 to +175	0.07	600	43 35	B-9
250MA80	800	1,000	1,100	700	9,000	405,000	50		-40 to +175	-40 to +175	0.07	600		
250MA100	1,000	1,200	1,100	700	9,000	405,000	50		-40 to +175	-40 to +175	0.07	600		
250MA120	1,200	1,400	1,100	700	9,000	405,000	50		-40 to +175	-40 to +175	0.07	600		
250MA140	1,400	1,600	1,100	700	9,000	405,000	50		-40 to +175	-40 to +175	0.07	600		
250MA160	1,600	1,800	1,100	700	9,000	405,000	50		-40 to +175	-40 to +175	0.07	600		
250MA180	1,800	2,000	1,100	700	9,000	405,000	50		-40 to +175	-40 to +175	0.07	600		

※ は推奨値 Recommended Value

3. 定格・特性表 Specifications

大電力用（スタッド型・MCB シリーズ） Power Rectifier Diodes (Stud Type・MCB-Series)

Type No.	V_{RRM} [V]	V_{RSM} [V]	$I_{F(RMS)}$ [A]	I_o [A]	I_{FSM} [A]	I^2t [A ² s]	I_{RM} [mA]	V_{FM} [V]	T_{jw} [°C]	T_{stg} [°C]	$R_{th(j-c)}$ [°C/W]	Weight [g]	Torque [N・m] ※	Outline No.
80MCB180	1,800	2,000	125	80	1,600	12,800	20	1.63 (I_{FM} =250A)	-40 to +150	-40 to +150	0.45	98	17	B-12
80MCB250	2,500	2,750	125	80	1,600	12,800	20		-40 to +150	-40 to +150	0.45	98	13.5	
200MCB180	1,800	2,000	310	200	4,000	80,000	30	1.64 (I_{FM} =630A)	-40 to +150	-40 to +150	0.2	197	34 27	B-11
200MCB200	2,000	2,200	310	200	4,000	80,000	30		-40 to +150	-40 to +150	0.2	197		
200MCB250	2,500	2,750	310	200	4,000	80,000	30		-40 to +150	-40 to +150	0.2	197		
300MCB180	1,800	2,000	470	300	6,000	180,000	40	1.64 (I_{FM} =940A)	-40 to +150	-40 to +150	0.14	450	43 35	B-13
300MCB200	2,000	2,200	470	300	6,000	180,000	40		-40 to +150	-40 to +150	0.14	450		
300MCB250	2,500	2,750	470	300	6,000	180,000	40		-40 to +150	-40 to +150	0.14	450		

※ は推奨値 Recommended Value

大電力用（スタッド型・MAB シリーズ） Power Rectifier Diodes (Stud Type・MAB-Series)

Type No.	V_{RRM} [V]	V_{RSM} [V]	$I_{F(RMS)}$ [A]	I_o [A]	I_{FSM} [A]	I^2t [A ² s]	I_{RM} [mA]	V_{FM} [V]	T_{jw} [°C]	T_{stg} [°C]	$R_{th(j-c)}$ [°C/W]	Weight [g]	Torque [N・m] ※	Outline No.
100MAB180	1,800	2,000	160	100	2,000	20,000	20	1.6 (I_{FM} =314A)	-40 to +150	-40 to +150	0.3	105	17 13.5	B-12
100MAB200	2,000	2,200	160	100	2,000	20,000	20		-40 to +150	-40 to +150	0.3	105		
100MAB250	2,500	2,750	160	100	2,000	20,000	20		-40 to +150	-40 to +150	0.3	105		
100MAB300	3,000	3,300	160	100	2,000	20,000	20		-40 to +150	-40 to +150	0.3	105		
200MAB180	1,800	2,000	310	200	5,000	125,000	30	1.6 (I_{FM} =630A)	-40 to +150	-40 to +150	0.15	200	34 27	B-11
200MAB200	2,000	2,200	310	200	5,000	125,000	30		-40 to +150	-40 to +150	0.15	200		
200MAB250	2,500	2,750	310	200	5,000	125,000	30		-40 to +150	-40 to +150	0.15	200		
200MAB300	3,000	3,300	310	200	5,000	125,000	30		-40 to +150	-40 to +150	0.15	200		
400MAB180	1,800	2,000	630	400	7,500	281,000	40	1.7 (I_{FM} =1,260A)	-40 to +150	-40 to +150	0.1	455	43 35	B-13
400MAB200	2,000	2,200	630	400	7,500	281,000	40		-40 to +150	-40 to +150	0.1	455		
400MAB250	2,500	2,750	630	400	7,500	281,000	40		-40 to +150	-40 to +150	0.1	455		
400MAB300	3,000	3,300	630	400	7,500	281,000	40		-40 to +150	-40 to +150	0.1	455		

※ は推奨値 Recommended Value

大電力用（平型・PJA シリーズ） Power Rectifier Diodes (Flat Package Type・PJA-Series)

Type No.	V _{RRM} [V]	V _{RSM} [V]	I _{F(RMS)} [A]	I _o [A]	I _{FSM} [A]	I ² t [A ² s]	I _{RM} [mA]	V _{FM} [V]	T _{Jw} [°C]	T _{stg} [°C]	R _{th(j-c)} [°C/W]	Weight [g]	Mounting Force [kN] ※	Outline No.
253PJA60	600	800	390	250	2,700	36,400	20	1.8 (I _{FM} =800A)	-60 to +150	-60 to +175	0.18	45	8 6	B-14
253PJA80	800	1,000	390	250	2,700	36,400	20		-60 to +150	-60 to +175	0.18	45		
253PJA100	1,000	1,200	390	250	2,700	36,400	20		-60 to +150	-60 to +175	0.18	45		
253PJA120	1,200	1,400	390	250	2,700	36,400	20		-60 to +150	-60 to +175	0.18	45		
253PJA140	1,400	1,600	390	250	2,700	36,400	20		-60 to +150	-60 to +175	0.18	45		
253PJA160	1,600	1,800	390	250	2,700	36,400	20		-60 to +150	-60 to +175	0.18	45		
303PJA180	1,800	2,000	470	300	5,000	125,000	30	1.93 (I _{FM} =940A)	-40 to +150	-40 to +150	0.1	70	12 6	
303PJA200	2,000	2,200	470	300	5,000	125,000	30		-40 to +150	-40 to +150	0.1	70		
303PJA250	2,500	2,750	470	300	5,000	125,000	30		-40 to +150	-40 to +150	0.1	70		
403PJA60	600	800	630	400	4,000	80,000	20	1.87 (I _{FM} =1,260A)	-60 to +150	-60 to +175	0.1	70	10 8	
403PJA80	800	1,000	630	400	4,000	80,000	20		-60 to +150	-60 to +175	0.1	70		
403PJA120	1,200	1,400	630	400	4,000	80,000	20		-60 to +150	-60 to +175	0.1	70		
403PJA140	1,400	1,600	630	400	4,000	80,000	20		-60 to +150	-60 to +175	0.1	70		
403PJA160	1,600	1,800	630	400	4,000	80,000	20		-60 to +150	-60 to +175	0.1	70		
503PJA180	1,800	2,000	785	500	7,500	281,000	40	1.84 (I _{FM} =1,500A)	-40 to +150	-40 to +150	0.06	120	15 10	
503PJA200	2,000	2,200	785	500	7,500	281,000	40		-40 to +150	-40 to +150	0.06	120		
503PJA250	2,500	2,750	785	500	7,500	281,000	40		-40 to +150	-40 to +150	0.06	120		
603PJA250	2,500	2,750	940	600	10,000	500,000	30	1.85 (I _{FM} =1,900A)	-40 to +150	-40 to +150	0.05	240	B-15	
603PJA400	4,000	4,400	940	600	10,000	500,000	30		-40 to +150	-40 to +150	0.05	240		
703PJA60	600	800	1100	700	9,000	405,000	50	1.67 (I _{FM} =2,200A)	-60 to +150	-60 to +175	0.06	120	15 12	
703PJA80	800	1,000	1100	700	9,000	405,000	50		-60 to +150	-60 to +175	0.06	120		
703PJA100	1,000	1,200	1100	700	9,000	405,000	50		-60 to +150	-60 to +175	0.06	120		
703PJA120	1,200	1,400	1,100	700	9,000	405,000	50		-60 to +150	-60 to +175	0.06	120		
703PJA140	1,400	1,600	1,100	700	9,000	405,000	50		-60 to +150	-60 to +175	0.06	120		
703PJA160	1,600	1,800	1,100	700	9,000	405,000	50		-60 to +150	-60 to +175	0.06	120		
801PJA250	2,500	2,750	1,250	800	16,000	1.28 × 10 ⁶	60	1.56 (I _{FM} =2,500A)	-40 to +150	-40 to +150	0.03	400	35 30	
801PJA400	4,000	4,400	1,250	800	16,000	1.28 × 10 ⁶	60		-40 to +150	-40 to +150	0.03	400		
1003PJA250	2,500	2,750	1,570	1,000	20,000	2 × 10 ⁶	50	1.43 (I _{FM} =3,140A)	-40 to +150	-40 to +150	0.03	430	B-17	
1003PJA300	3,000	3,300	1,570	1,000	20,000	2 × 10 ⁶	50		-40 to +150	-40 to +150	0.03	430		
1003PJA	3,000	3,300	1,570	1,000	20,000	2 × 10 ⁶	50		-40 to +150	-40 to +150	0.03	430		
1500PJA10	100	120	2,350	1,500	18,000	1.62 × 10 ⁶	50	1.37 (I _{FM} =4,700A)	-40 to +150	-40 to +150	0.03	85	15 10	
1500PJA20	200	240	2,350	1,500	18,000	1.62 × 10 ⁶	50		-40 to +150	-40 to +150	0.03	85		
1500PJA40	400	480	2,350	1,500	18,000	1.62 × 10 ⁶	50		-40 to +150	-40 to +150	0.03	85		
1603PJA250	2,500	2,750	2,500	1,600	32,000	5.1 × 10 ⁶	50	1.60 (I _{FM} =5,000A)	-40 to +150	-40 to +150	0.025	430	35 30	
1603PJA300	3,000	3,300	2,500	1,600	32,000	5.1 × 10 ⁶	50		-40 to +150	-40 to +150	0.025	430		
1603PJA	3,000	3,300	2,500	1,600	32,000	5.1 × 10 ⁶	50		-40 to +150	-40 to +150	0.025	430		
3500PJA10	100	120	5,500	3,500	35,000	6.12 × 10 ⁶	50	1.35 (I _{FM} =11,000A)	-40 to +175	-40 to +175	0.025	180	22 20	
3500PJA20	200	240	5,500	3,500	35,000	6.12 × 10 ⁶	50		-40 to +175	-40 to +175	0.025	180		
3500PJA40	400	480	5,500	3,500	35,000	6.12 × 10 ⁶	50		-40 to +175	-40 to +175	0.025	180		

※ は推奨値 Recommended Value

3. 定格・特性表 Specifications

3-3-2. ファストリカバリーダイオード スタッド型 Fast Recovery Diodes Stud Type

Type No.	V_{RRM} [V]	V_{RSM} [V]	$I_{F(RMS)}$ [A]	I_o [A]	I_{FSM} [A]	I^2t [A ² s]	I_{RM} [mA]	V_{FM} [V]	T_{jw} [°C]	T_{slg} [°C]	$R_{th(j-c)}$ [°C/W]	Q_r [μC]	t_{rr} [μs]	Weight [g]	Torque [N · m] ※	Outline No.
15MLA160	1,600	1,800	39	25	600	1,800	10	1.85 (I_{FM} =80A)	-40 to +125	-40 to +125	0.6	105	3.5	19	2.9 2.4	B-1
15MLA180	1,800	2,000	39	25	600	1,800	10		-40 to +125	-40 to +125	0.6	105	3.5	19		
15MLA200	2,000	2,200	39	25	600	1,800	10		-40 to +125	-40 to +125	0.6	105	3.5	19		
15MLS160	1,600	1,600	39	25	600	1,800	10		-40 to +125	-40 to +125	0.6	105	3.5	19		
15MLS200	2,000	2,000	39	25	600	1,800	10		-40 to +125	-40 to +125	0.6	105	3.5	19		
15MLS250	2,500	2,500	39	25	600	1,800	10		-40 to +125	-40 to +125	0.6	105	3.5	19		
100MLAB160	1,600	1,800	160	100	2,000	20,000	20	1.65 (I_{FM} =314A)	-40 to +125	-40 to +125	0.3	125	4	105	17 13.5	B-12
100MLS160	1,600	1,600	160	100	2,000	20,000	20		-40 to +125	-40 to +125	0.3	125	4	105		B-10
100MLS200	2,000	2,000	160	100	2,000	20,000	20		-40 to +125	-40 to +125	0.3	125	4	105		
100MLS250	2,500	2,500	160	100	2,000	20,000	20		-40 to +125	-40 to +125	0.3	125	4	105		
120FLAS300	3,000	3,000	185	120	3,000	45,000	40	4.00 (I_{FM} =380A)	-40 to +125	-40 to +125	0.16	200	4.5	105	2.9 2.0	B-2
120FLAS400	4,000	4,000	185	120	3,000	45,000	40		-40 to +125	-40 to +125	0.16	200	4.5	105		
120FLAS450	4,500	4,500	185	120	3,000	45,000	40		-40 to +125	-40 to +125	0.16	200	4.5	105		
120FLCS300	3,000	3,000	185	120	3,000	45,000	40		-40 to +125	-40 to +125	0.16	200	4.5	105		
120FLCS400	4,000	4,000	185	120	3,000	45,000	40		-40 to +125	-40 to +125	0.16	200	4.5	105		
120FLCS450	4,500	4,500	185	120	3,000	45,000	40		-40 to +125	-40 to +125	0.16	200	4.5	105		
200FLAB200	2,000	2,200	310	200	6,000	180,000	40	1.60 (I_{FM} =630A)	-40 to +125	-40 to +125	0.16	1,100	5.5	250		B-8
200FLAB250	2,500	2,750	310	200	6,000	180,000	40		-40 to +125	-40 to +125	0.16	1,100	5.5	250		
200FLAB300	3,000	3,300	310	200	6,000	180,000	40		-40 to +125	-40 to +125	0.16	1,100	5.5	250		
200FLCB250	2,500	2,750	310	200	6,000	180,000	40		-40 to +125	-40 to +125	0.16	1,100	5.5	250		
200FLCB300	3,000	3,300	310	200	6,000	180,000	40		-40 to +125	-40 to +125	0.16	1,100	5.5	250		

※ は推奨値 Recommended Value

3-3-3. サイリスタ Thyristors

スタッド型・RP シリーズ Stud Type・RP-Series

Type No.	V _{RRM} V _{DRM} [V]	V _{DSM} [V]	V _{RSM} [V]	I _{T(RMS)} [A]	I _o [A]	I _{TSM} [A]	I ² _t [A ² s]	I _{DM} I _{RM} [mA]	V _{TM} [V]	dv/dt [V/μs]	di/dt [A/μs]	I _{GT} [mA]	V _{GT} [V]	T _{jw} T _{stg} [°C]	R _{th(j-c)} [°C/W]	Weight [g]	Torque [N・m] ※	Outline No.
68RP10	100	150	150	94	60	1,200	7,200	15		200	100	150	3	-40 to +125	0.45	105		
68RP20	200	300	300	94	60	1,200	7,200	15	1.83	200	100	150	3	-40 to +125	0.45	105		
68RP40	400	500	500	94	60	1,200	7,200	15	(I _{TM}	200	100	150	3	-40 to +125	0.45	105		
68RP60	600	700	700	94	60	1,200	7,200	15	=180A)	200	100	150	3	-40 to +125	0.45	105		
68RP80	800	900	900	94	60	1,200	7,200	15		200	100	150	3	-40 to +125	0.45	105		
88RP20	200	300	300	125	80	1,500	11,200	15		200	100	150	3	-40 to +125	0.3	105		
88RP40	400	500	500	125	80	1,500	11,200	15	1.7	200	100	150	3	-40 to +125	0.3	105		
88RP60	600	700	700	125	80	1,500	11,200	15	(I _{TM}	200	100	150	3	-40 to +125	0.3	105		
88RP80	800	900	900	125	80	1,500	11,200	15	=250A)	200	100	150	3	-40 to +125	0.3	105		
108RP10	100	150	150	160	100	2,000	20,000	15		200	100	150	3	-40 to +125	0.3	105		
108RP20	200	300	300	160	100	2,000	20,000	15	1.50	200	100	150	3	-40 to +125	0.3	105		
108RP40	400	500	500	160	100	2,000	20,000	15	(I _{TM}	200	100	150	3	-40 to +125	0.3	105		
108RP60	600	700	700	160	100	2,000	20,000	15	=314A)	200	100	150	3	-40 to +125	0.3	105		
108RP80	800	900	900	160	100	2,000	20,000	15		200	100	150	3	-40 to +125	0.3	105		
158RP10	100	150	150	235	150	3,500	61,200	20		200	100	150	3	-40 to +125	0.15	200		
158RP20	200	300	300	235	150	3,500	61,200	20	1.56	200	100	150	3	-40 to +125	0.15	200		
158RP40	400	500	500	235	150	3,500	61,200	20	(I _{TM}	200	100	150	3	-40 to +125	0.15	200		
158RP60	600	700	700	235	150	3,500	61,200	20	=470A)	200	100	150	3	-40 to +125	0.15	200		
158RP80	800	900	900	235	150	3,500	61,200	20		200	100	150	3	-40 to +125	0.15	200		
208RP10	100	150	150	310	200	4,000	80,000	20		200	100	150	3	-40 to +125	0.15	200		
208RP20	200	300	300	310	200	4,000	80,000	20	1.45	200	100	150	3	-40 to +125	0.15	200		
208RP40	400	500	500	310	200	4,000	80,000	20	(I _{TM}	200	100	150	3	-40 to +125	0.15	200		
208RP60	600	700	700	310	200	4,000	80,000	20	=630A)	200	100	150	3	-40 to +125	0.15	200		
208RP80	800	900	900	310	200	4,000	80,000	20		200	100	150	3	-40 to +125	0.15	200		
308RP10	100	150	150	470	300	7,000	245,000	30		200	100	200	3	-40 to +125	0.1	455		
308RP20	200	300	300	470	300	7,000	245,000	30	1.68	200	100	200	3	-40 to +125	0.1	455		
308RP40	400	500	500	470	300	7,000	245,000	30	(I _{TM}	200	100	200	3	-40 to +125	0.1	455		
308RP60	600	700	700	470	300	7,000	245,000	30	=940A)	200	100	200	3	-40 to +125	0.1	455		
308RP80	800	900	900	470	300	7,000	245,000	30		200	100	200	3	-40 to +125	0.1	455		
408RP10	100	150	150	630	400	8,000	320,000	30		200	100	200	3	-40 to +125	0.1	455		
408RP20	200	300	300	630	400	8,000	320,000	30	1.50	200	100	200	3	-40 to +125	0.1	455		
408RP40	400	500	500	630	400	8,000	320,000	30	(I _{TM}	200	100	200	3	-40 to +125	0.1	455		
408RP60	600	700	700	630	400	8,000	320,000	30	=1,260A)	200	100	200	3	-40 to +125	0.1	455		
408RP80	800	900	900	630	400	8,000	320,000	30		200	100	200	3	-40 to +125	0.1	455		
508RP20	200	300	300	785	500	10,000	500,000	30	1.40	300	100	100	2.5	-40 to +125	0.08	455		
508RP40	400	500	500	785	500	10,000	500,000	30	(I _{TM}	300	100	100	2.5	-40 to +125	0.08	455		
									=1,500A)									

※ は推奨値 Recommended Value

3. 定格・特性表 Specifications

スタッド型・RS シリーズ Stud Type・RS-Series

Type No.	V_{RRM} V_{DRM} [V]	V_{DSM} [V]	V_{RSM} [V]	$I_{T(RMS)}$ [A]	I_o [A]	I_{TSM} [A]	I^2t [A ² s]	I_{DM} I_{RM} [mA]	V_{TM} [V]	dv/dt [V/μs]	di/dt [A/μs]	I_{GT} [mA]	V_{GT} [V]	T_{jw} T_{stg} [°C]	$R_{th(j-c)}$ [°C/W]	Weight [g]	Torque [N・m] ※	Outline No.
68RS100	1,000	1,200	1,200	94	60	1,200	7,200	30	1.83 (I_{TM} =180A)	200	200	150	3	-40 to +125	0.45	105	17 13.5	B-21
68RS120	1,200	1,400	1,400	94	60	1,200	7,200	30		200	200	150	3	-40 to +125	0.45	105		
68RS140	1,400	1,600	1,600	94	60	1,200	7,200	30		200	200	150	3	-40 to +125	0.45	105		
68RS160	1,600	1,750	1,800	94	60	1,200	7,200	30		200	200	150	3	-40 to +125	0.45	105		
88RS100	1,000	1,200	1,200	125	80	1,500	11,200	30	1.7 (I_{TM} =250A)	200	200	150	3	-40 to +125	0.3	105		
88RS120	1,200	1,400	1,400	125	80	1,500	11,200	30		200	200	150	3	-40 to +125	0.3	105		
88RS140	1,400	1,600	1,600	125	80	1,500	11,200	30		200	200	150	3	-40 to +125	0.3	105		
88RS160	1,600	1,750	1,800	125	80	1,500	11,200	30		200	200	150	3	-40 to +125	0.3	105		
128RS100	1,000	1,200	1,200	185	120	2,500	31,200	45	1.76 (I_{TM} =380A)	200	200	150	3	-40 to +125	0.2	200	34 27	B-22
128RS120	1,200	1,400	1,400	185	120	2,500	31,200	45		200	200	150	3	-40 to +125	0.2	200		
128RS140	1,400	1,600	1,600	185	120	2,500	31,200	45		200	200	150	3	-40 to +125	0.2	200		
128RS160	1,600	1,750	1,800	185	120	2,500	31,200	45		200	200	150	3	-40 to +125	0.2	200		
178RS100	1,000	1,200	1,200	275	175	3,500	61,200	45	1.65 (I_{TM} =550A)	200	200	150	3	-40 to +125	0.15	200		
178RS120	1,200	1,400	1,400	275	175	3,500	61,200	45		200	200	150	3	-40 to +125	0.15	200		
178RS140	1,400	1,600	1,600	275	175	3,500	61,200	45		200	200	150	3	-40 to +125	0.15	200		
178RS160	1,600	1,750	1,800	275	175	3,500	61,200	45		200	200	150	3	-40 to +125	0.15	200		
278RS100	1,000	1,200	1,200	420	270	5,500	150,000	60	1.95 (I_{TM} =850A)	200	200	200	3	-40 to +125	0.12	455	43 35	B-23
278RS120	1,200	1,400	1,400	420	270	5,500	150,000	60		200	200	200	3	-40 to +125	0.12	455		
278RS140	1,400	1,600	1,600	420	270	5,500	150,000	60		200	200	200	3	-40 to +125	0.12	455		
278RS160	1,600	1,750	1,800	420	270	5,500	150,000	60		200	200	200	3	-40 to +125	0.12	455		
358RS100	1,000	1,200	1,200	550	350	7,000	245,000	60	1.80 (I_{TM} =1,100A)	200	200	200	3	-40 to +125	0.1	455		
358RS120	1,200	1,400	1,400	550	350	7,000	245,000	60		200	200	200	3	-40 to +125	0.1	455		
358RS140	1,400	1,600	1,600	550	350	7,000	245,000	60		200	200	200	3	-40 to +125	0.1	455		
358RS160	1,600	1,750	1,800	550	350	7,000	245,000	60		200	200	200	3	-40 to +125	0.1	455		

※ は推奨値 Recommended Value

スタッド型・RT シリーズ Stud Type・RT-Series

Type No.	V_{RRM} V_{DRM} [V]	V_{DSM} [V]	V_{RSM} [V]	$I_{T(RMS)}$ [A]	I_o [A]	I_{TSM} [A]	I^2t [A ² s]	I_{DM} I_{RM} [mA]	V_{TM} [V]	dv/dt [V/μs]	di/dt [A/μs]	I_{GT} [mA]	V_{GT} [V]	T_{jw} T_{stg} [°C]	$R_{th(j-c)}$ [°C/W]	Weight [g]	Torque [N・m] ※	Outline No.
78RT180	1,800	2,000	2,000	110	70	1,300	8,400	30	1.88 (I_{TM} =220A)	200	200	150	3	-40 to +125	0.3	105	17 13.5	B-21
78RT200	2,000	2,200	2,200	110	70	1,300	8,400	30		200	200	150	3	-40 to +125	0.3	105		
78RT250	2,500	2,500	2,750	110	70	1,300	8,400	30		200	200	150	3	-40 to +125	0.3	105		
158RT180	1,800	2,000	2,000	235	150	2,800	39,000	45	1.80 (I_{TM} =470A)	200	200	150	3	-40 to +125	0.15	200	34 27	B-22
158RT200	2,000	2,200	2,200	235	150	2,800	39,000	45		200	200	150	3	-40 to +125	0.15	200		
158RT250	2,500	2,500	2,750	235	150	2,800	39,000	45		200	200	150	3	-40 to +125	0.15	200		
258RT180	1,800	2,000	2,000	390	250	4,600	105,000	80	1.76 (I_{TM} =785A)	200	200	200	3	-40 to +125	0.1	455	43 35	B-23
258RT200	2,000	2,200	2,200	390	250	4,600	105,000	80		200	200	200	3	-40 to +125	0.1	455		
258RT250	2,500	2,500	2,750	390	250	4,600	105,000	80		200	200	200	3	-40 to +125	0.1	455		

※ は推奨値 Recommended Value

平型・PA, PAB シリーズ Flat Package Type・PA, PAB-Series

Type No.	V_{RRM} V_{DRM} [V]	V_{DSM} [V]	V_{RSM} [V]	$I_{T(RMS)}$ [A]	I_o [A]	I_{TSM} [A]	I^2t [A ² s]	I_{DM} I_{RM} [mA]	V_{TM} [V]	dv/dt [V/μs]	di/dt [A/μs]	I_{GT} [mA]	V_{GT} [V]	T_{jw} T_{slg} [°C]	$R_{th(j-c)}$ [°C/W]	Weight [g]	Mounting Force [kN] ※	Outline No.
253PA100	1,000	1,150	1,150	390	250	4,000	80,000	45	2.25 (I_{TM} =780A)	500	150	150	3	-40 to +125	0.1	80	12 6	B-28
253PA120	1,200	1,350	1,350	390	250	4,000	80,000	45		500	150	150	3	-40 to +125	0.1	80		
253PA140	1,400	1,550	1,550	390	250	4,000	80,000	45		500	150	150	3	-40 to +125	0.1	80		
253PA160	1,600	1,750	1,750	390	250	4,000	80,000	45		500	150	150	3	-40 to +125	0.1	80		
403PAB180	1,800	2,000	2,000	630	400	7,000	245,000	60	2.12 (I_{TM} =1,260A)	200	200	200	3	-40 to +125	0.05	250	15 12	B-30
403PAB200	2,000	2,200	2,200	630	400	7,000	245,000	60		200	200	200	3	-40 to +125	0.05	250		
403PAB250	2,500	2,500	2,750	630	400	7,000	245,000	60		200	200	200	3	-40 to +125	0.05	250		
503PA60	600	800	800	785	500	10,000	500,000	60	1.96 (I_{TM} =1,500A)	500	150	150	3	-40 to +125	0.06	135	15 10	B-28
503PA80	800	1,000	1,000	785	500	10,000	500,000	60		500	150	150	3	-40 to +125	0.06	135		
503PA100	1,000	1,200	1,200	785	500	10,000	500,000	60		500	150	150	3	-40 to +125	0.06	135		
503PA120	1,200	1,400	1,400	785	500	10,000	500,000	60		500	150	150	3	-40 to +125	0.06	135		
503PA140	1,400	1,600	1,600	785	500	10,000	500,000	60		500	150	150	3	-40 to +125	0.06	135		
503PA160	1,600	1,800	1,800	785	500	10,000	500,000	60	2.10 (I_{TM} =1,500A)	500	150	150	3	-40 to +125	0.06	135		B-30
503PAB180	1,800	2,000	2,000	785	500	7,000	245,000	60		200	200	200	3	-40 to +125	0.05	250		
503PAB200	2,000	2,200	2,200	785	500	7,000	245,000	60		200	200	200	3	-40 to +125	0.05	250		
503PAB250	2,500	2,500	2,750	785	500	7,000	245,000	60	1.88 (I_{TM} =1,700A)	200	200	200	3	-40 to +125	0.05	250	15 12	B-28
553PA60	600	800	800	860	550	10,000	500,000	60		200	150	200	3	-40 to +125	0.06	135		
553PA80	800	1,000	1,000	860	550	10,000	500,000	60		200	150	200	3	-40 to +125	0.06	135		
553PA100	1,000	1,200	1,200	860	550	10,000	500,000	60		200	150	200	3	-40 to +125	0.06	135		
553PA120	1,200	1,400	1,400	860	550	10,000	500,000	60		200	150	200	3	-40 to +125	0.06	135		
553PA140	1,400	1,600	1,600	860	550	10,000	500,000	60		200	150	200	3	-40 to +125	0.06	135		
553PA160	1,600	1,800	1,800	860	550	10,000	500,000	60	1.65 (I_{TM} =2,500A)	200	150	200	3	-40 to +125	0.06	135		B-28
803PA20	200	300	300	1,250	800	12,000	720,000	60		200	200	200	3	-40 to +125	0.045	135		
803PA40	400	500	500	1,250	800	12,000	720,000	60		200	200	200	3	-40 to +125	0.045	135		
803PA60	600	700	700	1,250	800	12,000	720,000	60		200	200	200	3	-40 to +125	0.045	135		
803PA80	800	900	900	1,250	800	12,000	720,000	60		200	200	200	3	-40 to +125	0.045	135		
803PA100	1,000	1,200	1,200	1,250	800	12,000	720,000	60		200	200	200	3	-40 to +125	0.045	135		
803PA120	1,200	1,300	1,400	1,250	800	12,000	720,000	60	1.85 (I_{TM} =2,700A)	200	200	200	3	-40 to +125	0.045	135		
853PA160	1,600	1,800	1,800	1,330	850	15,000	1.125×10^6	80		200	200	200	3	-40 to +125	0.025	360		
853PAB180	1,800	2,000	2,000	1,330	850	14,000	9.8×10^5	120	2.25 (I_{TM} =2,700A)	200	200	200	3	-40 to +125	0.025	360		
853PAB250	2,500	2,500	2,750	1,330	850	14,000	9.8×10^5	120		200	200	200	3	-40 to +125	0.025	360		
1003PA100	1,000	1,200	1,200	1,570	1,000	17,000	1.44×10^6	80	1.7 (I_{TM} =3,200A)	200	200	200	3	-40 to +125	0.025	360	35 30	B-31
1003PA120	1,200	1,400	1,400	1,570	1,000	17,000	1.44×10^6	80		200	200	200	3	-40 to +125	0.025	360		
1003PA140	1,400	1,600	1,600	1,570	1,000	17,000	1.44×10^6	80		200	200	200	3	-40 to +125	0.025	360		
1003PA160	1,600	1,750	1,800	1,570	1,000	17,000	1.44×10^6	80		200	200	200	3	-40 to +125	0.025	360		
1003PAB180	1,800	2,000	2,000	1,570	1,000	16,000	1.28×10^6	120	1.7 (I_{TM} =3,200A)	200	200	200	3	-40 to +125	0.025	460		B-31
1003PAB200	2,000	2,200	2,200	1,570	1,000	16,000	1.28×10^6	120		200	200	200	3	-40 to +125	0.025	460		
1003PAB250	2,500	2,500	2,750	1,570	1,000	16,000	1.28×10^6	120		200	200	200	3	-40 to +125	0.025	460		
1503PA40	400	500	500	2,350	1,500	25,000	3.125×10^6	100	1.7 (I_{TM} =4,700A)	200	200	200	3	-40 to +125	0.025	460		B-33
1503PA60	600	700	700	2,350	1,500	25,000	3.125×10^6	100		200	200	200	3	-40 to +125	0.025	460		
1503PA80	800	900	900	2,350	1,500	25,000	3.125×10^6	100		200	200	200	3	-40 to +125	0.025	460		
1503PA100	1,000	1,200	1,200	2,350	1,500	25,000	3.125×10^6	100		200	200	200	3	-40 to +125	0.025	460		
1503PA120	1,200	1,300	1,400	2,350	1,500	25,000	3.125×10^6	100		200	200	200	3	-40 to +125	0.025	460		
1503PA160	1,600	1,750	1,800	2,350	1,500	25,000	3.125×10^6	100		200	200	200	3	-40 to +125	0.025	460		
3003PA40	400	500	500	4,700	3,000	50,000	1.25×10^7	150	1.45 (I_{TM} =9,500A)	200	200	200	3	-40 to +125	0.01	740	55 50	B-33
3003PA80	800	900	900	4,700	3,000	50,000	1.25×10^7	150		200	200	200	3	-40 to +125	0.01	740		
3003PA100	1,000	1,200	1,200	4,700	3,000	45,000	1.01×10^7	150	1.75 (I_{TM} =9,500A)	200	200	200	3	-40 to +125	0.01	740		B-33
3003PA120	1,200	1,400	1,400	4,700	3,000	45,000	1.01×10^7	150		200	200	200	3	-40 to +125	0.01	740		
3003PA160	1,600	1,750	1,800	4,700	3,000	45,000	1.01×10^7	150	1.6 (I_{TM} =13,000A)	200	200	200	3	-40 to +125	0.01	740		B-33
4003PA40	400	500	500	6,300	4,000	60,000	1.8×10^7	150		200	200	200	3	-40 to +125	0.01	740		
4003PA60	600	700	700	6,300	4,000	60,000	1.8×10^7	150		200	200	200	3	-40 to +125	0.01	740		
4003PA80	800	900	900	6,300	4,000	60,000	1.8×10^7	150		200	200	200	3	-40 to +125	0.01	740		

※ ☐ は推奨値 Recommended Value

3. 定格・特性表 Specifications

3-3-4. 高速スイッチングサイリスタ Fast Turn-Off Thyristors

スタッド型・RLE シリーズ Stud Type・RLE-Series $t_q = 15\mu s$

Type No.	V_{RRM} V_{DRM} [V]	V_{DSM} [V]	V_{RSM} [V]	$I_{T(RMS)}$ [A]	I_o [A]	I_{TSM} [A]	I^2t [A ² s]	I_{DM} I_{RM} [mA]	V_{TM} [V]	dv/dt [V/ μs]	di/dt [A/ μs]	I_{GT} [mA]	V_{GT} [V]	t_q [μs]	T_{jw} T_{stg} [°C]	$R_{th(j-c)}$ [°C/W]	Weight [g]	Torque [N·m] ※	Outline No.
88RLE60	600	700	700	125	80	1,500	11,200	15	2.15 ($I_{TM}=250A$)	100	200	150	3	15	-40 to +125	0.3	105	17 13.5	B-21
88RLE80	800	900	900	125	80	1,500	11,200	15		100	200	150	3	15	-40 to +125	0.3	105		
178RLE60	600	700	700	270	175	3,500	61,200	20	2.20 ($I_{TM}=550A$)	100	200	150	3	15	-40 to +125	0.15	200	34 27	B-22
178RLE80	800	900	900	270	175	3,500	61,200	20		100	200	150	3	15	-40 to +125	0.15	200		
208RLE20	200	300	300	310	200	4,000	80,000	20	1.65 ($I_{TM}=630A$)	100	100	150	3	15	-40 to +125	0.15	200		
208RLE40	400	500	500	310	200	4,000	80,000	20		100	100	150	3	15	-40 to +125	0.15	200		
308RLE60	600	700	700	470	300	6,000	180,000	40	2.24 ($I_{TM}=940A$)	100	200	200	3	15	-40 to +125	0.1	455	43 35	B-23
308RLE80	800	900	900	470	300	6,000	180,000	40		100	200	200	3	15	-40 to +125	0.1	455		
358RLE20	200	300	300	550	350	7,000	245,000	40	1.70 ($I_{TM}=1,100A$)	100	100	200	3	15	-40 to +125	0.1	455		
358RLE40	400	500	500	550	350	7,000	245,000	40		100	100	200	3	15	-40 to +125	0.1	455		

※ ☐ は推奨値 Recommended Value

スタッド型・RLF シリーズ Stud Type・RLF-Series $t_q = 20\mu s$

Type No.	V_{RRM} V_{DRM} [V]	V_{DSM} [V]	V_{RSM} [V]	$I_{T(RMS)}$ [A]	I_o [A]	I_{TSM} [A]	I^2t [A ² s]	I_{DM} I_{RM} [mA]	V_{TM} [V]	dv/dt [V/ μs]	di/dt [A/ μs]	I_{GT} [mA]	V_{GT} [V]	t_q [μs]	T_{jw} T_{stg} [°C]	$R_{th(j-c)}$ [°C/W]	Weight [g]	Torque [N·m] ※	Outline No.
88RLF60	600	700	700	125	80	1500	11,200	15	1.87 ($I_{TM}=250A$)	100	200	150	3	20	-40 to +125	0.3	105	17 13.5	B-21
88RLF80	800	900	900	125	80	1500	11,200	15		100	200	150	3	20	-40 to +125	0.3	105		
178RLF60	600	700	700	270	175	3500	61,200	20	1.90 ($I_{TM}=550A$)	100	200	150	3	20	-40 to +125	0.15	200	34 27	B-22
178RLF80	800	900	900	270	175	3500	61,200	20		100	200	150	3	20	-40 to +125	0.15	200		
308RLF60	600	700	700	470	300	6000	180,000	40	1.94 ($I_{TM}=940A$)	100	200	200	3	20	-40 to +125	0.1	455	43 35	B-23
308RLF80	800	900	900	470	300	6000	180,000	40		100	200	200	3	20	-40 to +125	0.1	455		

※ ☐ は推奨値 Recommended Value

スタッド型・RLG シリーズ Stud Type・RLG-Series $t_q = 22$ to $23\mu s$

Type No.	V_{RRM} V_{DRM} [V]	V_{DSM} [V]	V_{RSM} [V]	$I_{T(RMS)}$ [A]	I_o [A]	I_{TSM} [A]	I^2t [A ² s]	I_{DM} I_{RM} [mA]	V_{TM} [V]	dv/dt [V/ μs]	di/dt [A/ μs]	I_{GT} [mA]	V_{GT} [V]	t_q [μs]	T_{jw} T_{stg} [°C]	$R_{th(j-c)}$ [°C/W]	Weight [g]	Torque [N·m] ※	Outline No.
88RLG100	1,000	1,200	1,200	125	80	1,500	11,200	30	2.59 ($I_{TM}=250A$)	200	200	150	3	22	-40 to +125	0.3	105	17 13.5	B-21
88RLG120	1,200	1,300	1,400	125	80	1,500	11,200	30		200	200	150	3	22	-40 to +125	0.3	105		
178RLG100	1,000	1,200	1,200	270	175	3,500	61,200	45	2.61 ($I_{TM}=550A$)	200	200	150	3	22	-40 to +125	0.15	200	34 27	B-22
178RLG120	1,200	1,300	1,400	270	175	3,500	61,200	45		200	200	150	3	22	-40 to +125	0.15	200		
258RLG100	1,000	1,200	1,200	390	250	5,500	150,000	60	2.70 ($I_{TM}=785A$)	200	200	200	3	23	-40 to +125	0.1	455	43 35	B-23
258RLG120	1,200	1,300	1,400	390	250	5,500	150,000	60		200	200	200	3	23	-40 to +125	0.1	455		

※ ☐ は推奨値 Recommended Value

スタッド型・RLHシリーズ Stud Type・RLH-Series $t_q = 30\mu s$

Type No.	V_{RRM} V_{DRM} [V]	V_{DSM} [V]	V_{RSM} [V]	$I_{T(RMS)}$ [A]	I_o [A]	I_{TSM} [A]	I^2t [A ² s]	I_{DM} I_{RM} [mA]	V_{TM} [V]	dv/dt [V/ μs]	di/dt [A/ μs]	I_{GT} [mA]	V_{GT} [V]	t_q [μs]	T_{jw} T_{stg} [°C]	$R_{th(j-c)}$ [°C/W]	Weight [g]	Torque [N·m] ※	Outline No.
88RLH100	1,000	1,200	1,200	125	80	1,500	11,200	30	2.18 ($I_{TM}=250A$)	200	200	150	3	30	-40 to +125	0.3	105	17 13.5	B-21
88RLH120	1,200	1,300	1,400	125	80	1,500	11,200	30		200	200	150	3	30	-40 to +125	0.3	105		
178RLH120	1,200	1,300	1,400	270	175	3,500	61,200	45	2.32 ($I_{TM}=550A$)	200	200	150	3	30	-40 to +125	0.15	200	34 27	B-22
258RLH100	1,000	1,200	1,200	390	250	5,500	150,000	60	2.27 ($I_{TM}=785A$)	200	200	200	3	30	-40 to +125	0.1	455	43 35	B-23
258RLH120	1,200	1,300	1,400	390	250	5,500	150,000	60		200	200	200	3	30	-40 to +125	0.1	455		

※ ☐ は推奨値 Recommended Value

平型・PLF シリーズ Flat Package Type・PLF-Series $t_q = 20\mu s$

Type No.	V_{RRM} V_{DRM} [V]	V_{DSM} [V]	V_{RSM} [V]	$I_{T(RMS)}$ [A]	I_o [A]	I_{TSM} [A]	I^2t [A ² s]	I_{DM} I_{RM} [mA]	V_{TM} [V]	dv/dt [V/ μs]	di/dt [A/ μs]	I_{GT} [mA]	V_{GT} [V]	t_q [μs]	T_{jw} T_{stg} [°C]	$R_{th(j-c)}$ [°C/W]	Weight [g]	Mounting Force [kN] ※	Outline No.
1003PLF100	1,000	1,200	1,200	1,570	1,000	18,000	1.62×10^6	150	2.25 ($I_{TM} = 3,200A$)	500	200	200	3	20	-40 to +125	0.025	460	35 30	B-31
1003PLF120	1,200	1,300	1,400	1,570	1,000	18,000	1.62×10^6	150		500	200	200	3	20	-40 to +125	0.025	460		
2503PLF100	1,000	1,200	1,200	3,900	2,500	40,000	8×10^6	150	2.03 ($I_{TM} = 8,000A$)	200	200	200	3	20	-40 to +125	0.012	740	55 50	B-33

※ は推奨値 Recommended Value

平型・PLH シリーズ Flat Package Type・PLH-Series $t_q = 30\mu s$

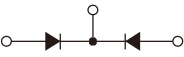
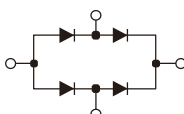
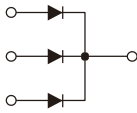
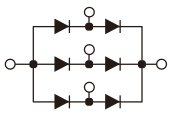
Type No.	V_{RRM} V_{DRM} [V]	V_{DSM} [V]	V_{RSM} [V]	$I_{T(RMS)}$ [A]	I_o [A]	I_{TSM} [A]	I^2t [A ² s]	I_{DM} I_{RM} [mA]	V_{TM} [V]	dv/dt [V/ μs]	di/dt [A/ μs]	I_{GT} [mA]	V_{GT} [V]	t_q [μs]	T_{jw} T_{stg} [°C]	$R_{th(j-c)}$ [°C/W]	Weight [g]	Mounting Force [kN] ※	Outline No.
1003PLH120	1,200	1,300	1,400	1,570	1,000	16,000	1.28×10^6	120	2.3 ($I_{TM} = 3,200A$)	200	200	400	3	30	-40 to +125	0.03	460	35 30	B-31
2503PLH100	1,000	1,200	1,200	3,900	2,500	40,000	8×10^6	150	2.07 ($I_{TM} = 8,000A$)	200	200	200	3	30	-40 to +125	0.012	740	55 50	B-33
2503PLH120	1,200	1,300	1,400	3,900	2,500	40,000	8×10^6	150		200	200	200	3	30	-40 to +125	0.012	740		

※ は推奨値 Recommended Value

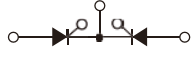
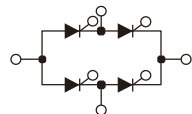
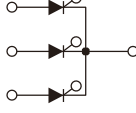
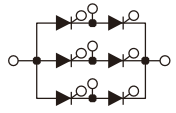
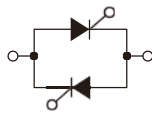
3. 定格・特性表 Specifications

3-4. スタック製品 Stack Products

3-4-1. スタック Stack Assemblies

結線回路 Circuit Schema	直流出力電流※ 1 Output DC Current [A]
	Min. Max. 11 to 1,755
	22 to 3,510
	22 to 3,080
	29 to 5,010
	29 to 5,010

※ 1 直流出力電流の最大値は、風冷 5m/s での値です。
DC output current Max. would be based on the value
from air speed of 5m/s.

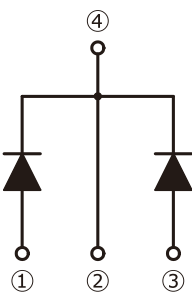
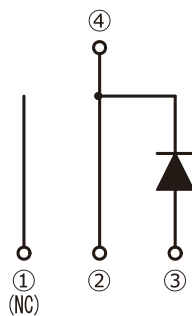
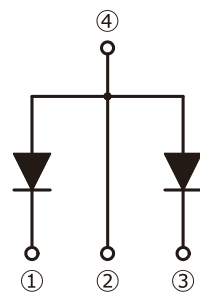
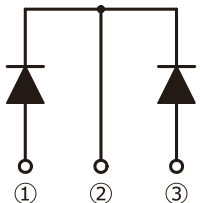
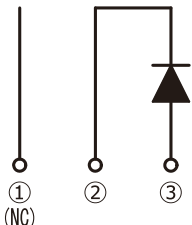
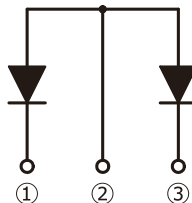
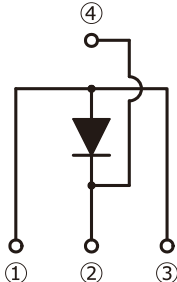
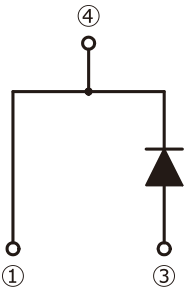
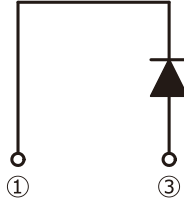
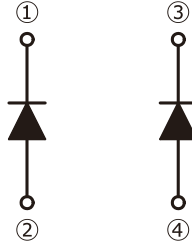
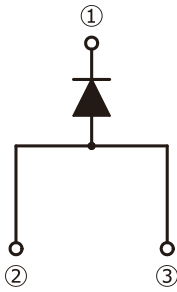
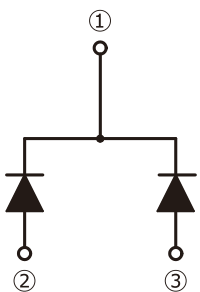
結線回路 Circuit Schema	直流出力電流 Output DC Current [A]
	Min. Max. 8 to 825
	16 to 1,650
	16 to 1,650
	21 to 2,260
	21 to 2,260
結線回路 Circuit Schema	交流出力電流 〈RMS〉 Output AC Current [A]
	※ 17 to 1,830

自己冷却型小電力用整流スタック P シリーズ Diode Stack P Series

Type No.	平均出力電流 Average Rectified Output Current $I_o (AV)$		繰返し ピーク逆電圧 Repetitive Peak Reverse Voltage	結線回路 Circuit Schema	サージ順電流 Surge Forward Current	使用素子 Device Built-in	端子形状 Terminals	Outline No.
	Ta = 40°C	Ta = 50°C						
PB508AC	6A ※ 1	5.8A ※ 1	(VRRM=) 800V	単相ブリッジ	400A	PB508AC	ファストンタブ	F-1
P9B80	9A	9A					fast-on tab	F-2
P16B80	16A	14A					250 相当	F-3
P20B80	20A	19A						F-4
PT308AC	6A ※ 1	6A ※ 1		三相ブリッジ	400A	PT308AC	ファストンタブ	F-5
P16T80	16A	15A					fast-on tab 250 相当	F-6

※ 1 □ 100×1.0t 鉄、アルミ or 銅板取付け。
Mounted on 100×1.0t iron, aluminum or copper plate.

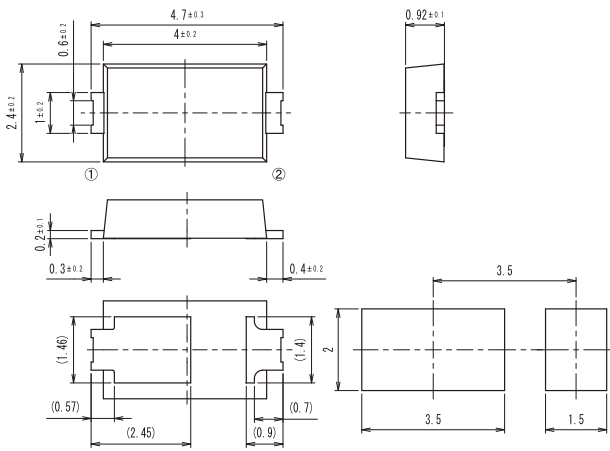
4. 結線図 (ディスクリート製品) Connection Type of Discrete Products

Type-A	Type-B	Type-C	Type-D
			
Type-E	Type-F	Type-G	Type-H
			
Type-I	Type-J	Type-K	Type-L
			
Type-M			
			

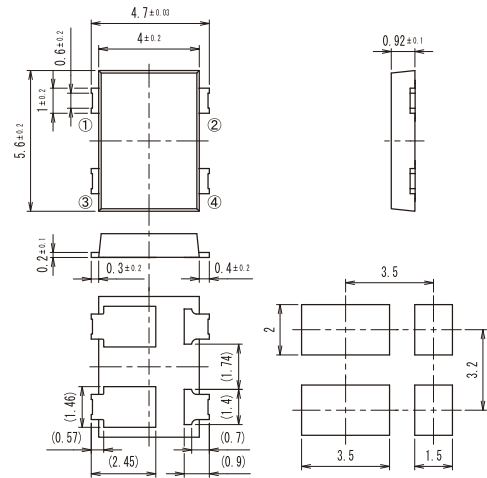
5. 外形寸法図 Outline

<A-1> 3Max ×ø2.7 (DO-41S)	<A-2> DO-204AC (DO-15)
<A-3> DO-201AD	<A-4> SOD-323FL
<A-5> SOD-123	<A-6> DO-214AC (SMA)

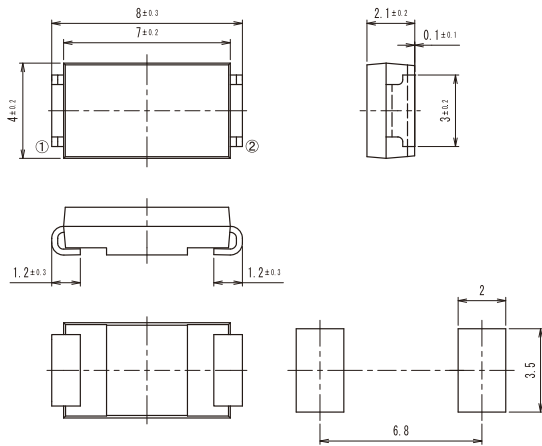
<A-7> NA (DO-221BC)



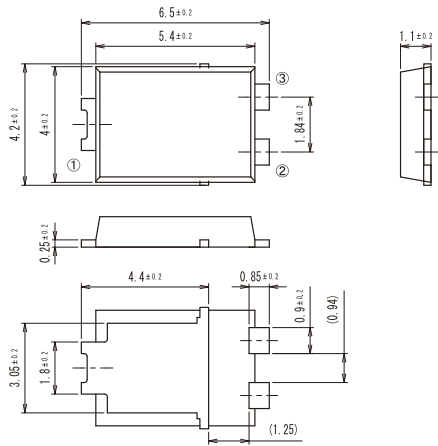
<A-8> NB



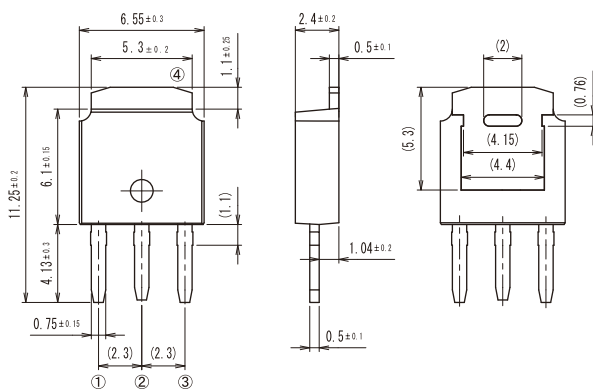
<A-9> nSMC



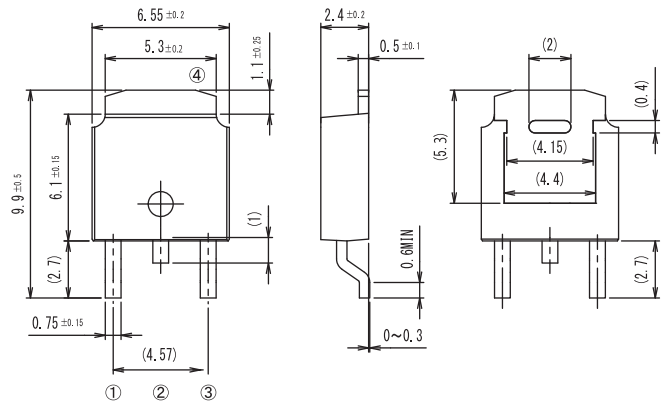
<A-10> TO-277



<A-11> TO-251



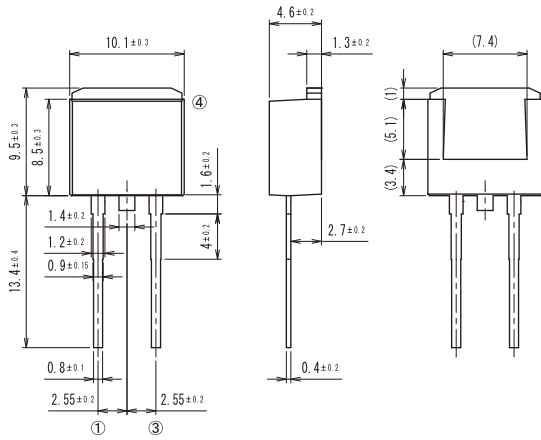
<A-12> TO-252 (Dpak)



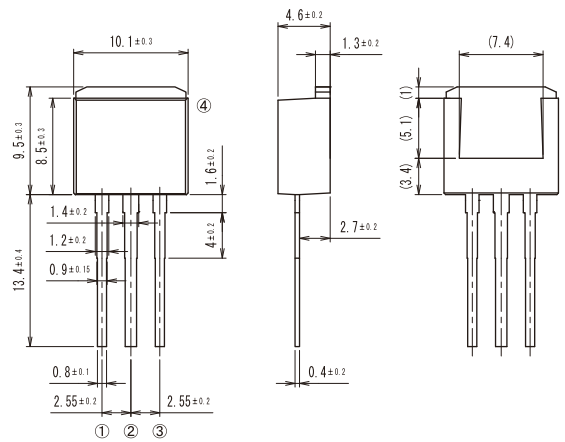
5. 外形寸法図 Outline

<A-13> TO-220 2pin	<A-14> TO-220
Technical drawing of TO-220 2pin package <A-13> showing front and side views with dimensions: - Front View: Total height 15.1±0.3, mounting hole diameter 10.1±0.3, hole spacing 10.1±0.3, hole diameter Ø3.6±0.2, lead height 5.6±0.3, lead width 1.4±0.2, lead pitch 2.55±0.2, lead width 1.2±0.2, lead width 0.8±0.2, total width 2.55±0.2. - Side View: Total height 4.6±0.2, mounting hole diameter 10.1±0.3, hole spacing 10.1±0.3, hole diameter Ø3.6±0.2, lead height 2.7±0.2, lead width 1.3±0.2, lead width 0.4±0.2.	Technical drawing of TO-220 package <A-14> showing front and side views with dimensions: - Front View: Total height 15.1±0.3, mounting hole diameter 10.1±0.3, hole spacing 10.1±0.3, hole diameter Ø3.6±0.2, lead height 5.6±0.3, lead width 1.4±0.2, lead pitch 2.55±0.2, lead width 1.2±0.2, lead width 0.8±0.2, total width 2.55±0.2. - Side View: Total height 4.6±0.2, mounting hole diameter 10.1±0.3, hole spacing 10.1±0.3, hole diameter Ø3.6±0.2, lead height 2.7±0.2, lead width 1.3±0.2, lead width 0.4±0.2.
<A-15> TO-220 Full-Mold 2pin	<A-16> TO-220 Full-Mold 2pin
Technical drawing of TO-220 Full-Mold 2pin package <A-15> showing front and side views with dimensions: - Front View: Total height 15.1±0.3, mounting hole diameter 10.1±0.2, hole spacing 10.1±0.2, hole diameter Ø3.2±0.2, lead height 3.6±0.2, lead width 1.6±0.2, lead pitch 2.55±0.2, lead width 1.2±0.2, lead width 0.6±0.2, total width 2.55±0.2. - Side View: Total height 4.5±0.2, mounting hole diameter 10.1±0.2, hole spacing 10.1±0.2, hole diameter Ø3.2±0.2, lead height 2.7±0.2, lead width 3±0.1, lead width 0.6±0.2.	Technical drawing of TO-220 Full-Mold 2pin package <A-16> showing front and side views with dimensions: - Front View: Total height 15.1±0.3, mounting hole diameter 10.1±0.2, hole spacing 10.1±0.2, hole diameter Ø3.2±0.2, lead height 3.6±0.2, lead width 1.2±0.2, lead pitch 2.55±0.2, lead width 1.2±0.2, lead width 0.6±0.2, total width 2.55±0.2. - Side View: Total height 4.5±0.2, mounting hole diameter 10.1±0.2, hole spacing 10.1±0.2, hole diameter Ø3.2±0.2, lead height 2.7±0.2, lead width 3±0.1, lead width 0.5±0.2.
<A-17> TO-220 Full-Mold	<A-18> TO-220 Full-Mold
Technical drawing of TO-220 Full-Mold package <A-17> showing front and side views with dimensions: - Front View: Total height 15.1±0.3, mounting hole diameter 10.1±0.2, hole spacing 10.1±0.2, hole diameter Ø3.2±0.2, lead height 3.6±0.2, lead width 1.6±0.2, lead pitch 2.55±0.2, lead width 1.2±0.2, lead width 0.6±0.2, total width 2.55±0.2. - Side View: Total height 4.5±0.2, mounting hole diameter 10.1±0.2, hole spacing 10.1±0.2, hole diameter Ø3.2±0.2, lead height 2.7±0.2, lead width 3±0.1, lead width 0.6±0.2.	Technical drawing of TO-220 Full-Mold package <A-18> showing front and side views with dimensions: - Front View: Total height 15.1±0.3, mounting hole diameter 10.1±0.2, hole spacing 10.1±0.2, hole diameter Ø3.2±0.2, lead height 3.6±0.2, lead width 1.2±0.2, lead pitch 2.55±0.2, lead width 1.2±0.2, lead width 0.6±0.2, total width 2.55±0.2. - Side View: Total height 4.5±0.2, mounting hole diameter 10.1±0.2, hole spacing 10.1±0.2, hole diameter Ø3.2±0.2, lead height 2.7±0.2, lead width 3±0.1, lead width 0.5±0.2.

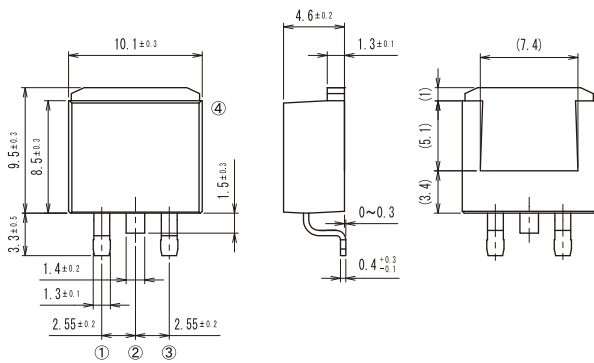
<A-19> TO-262 2pin



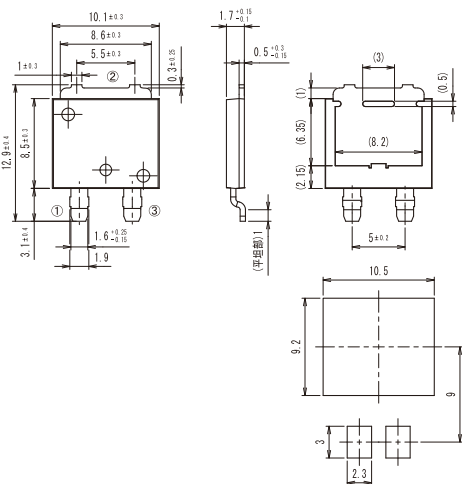
<A-20> TO-262



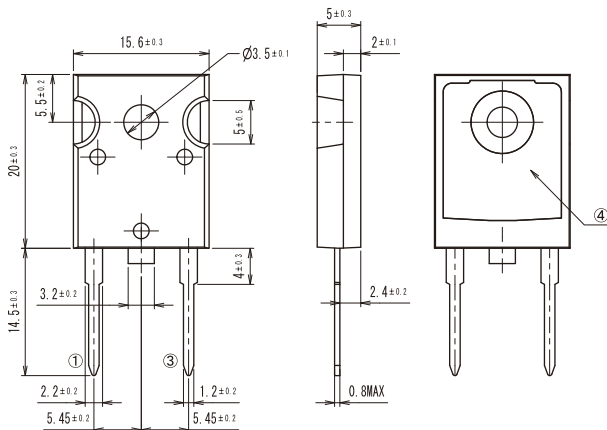
<A-21> TO-263 (D2pak)



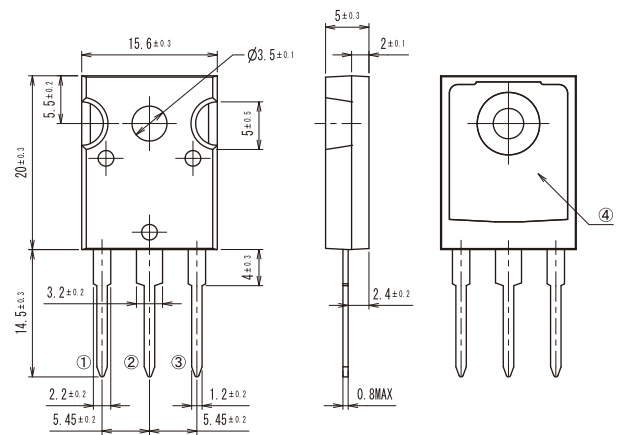
<A-22> TO-263LP



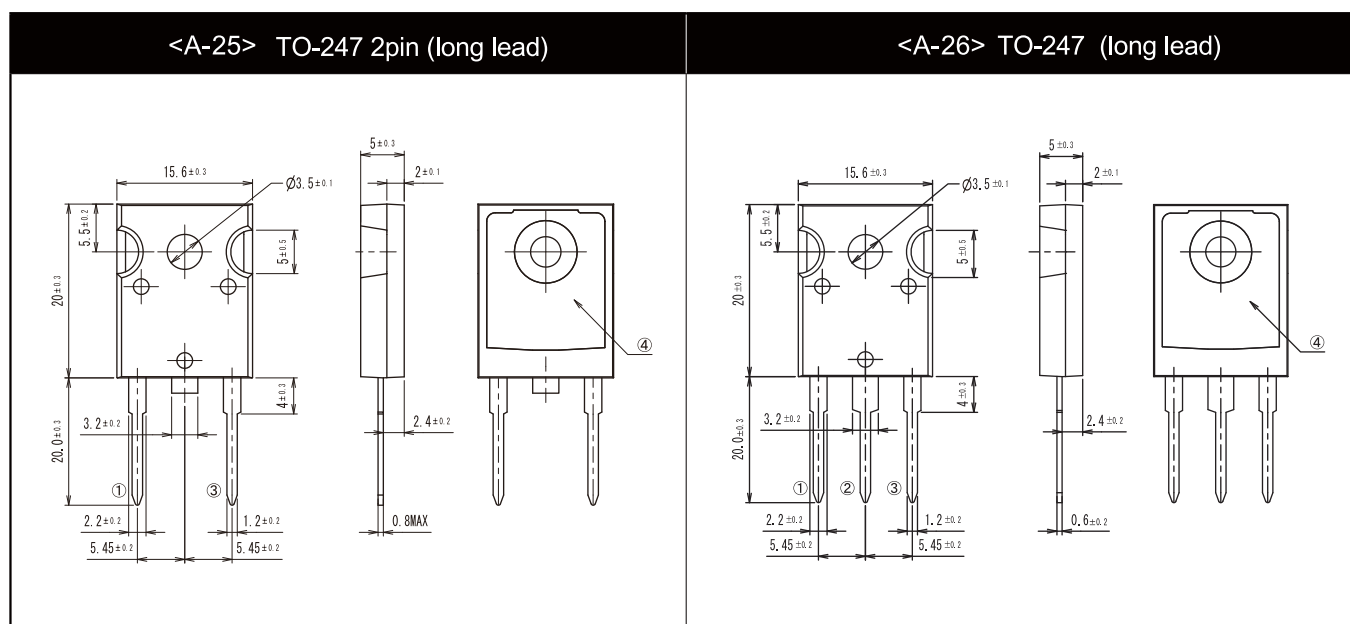
<A-23> TO-247 2pin



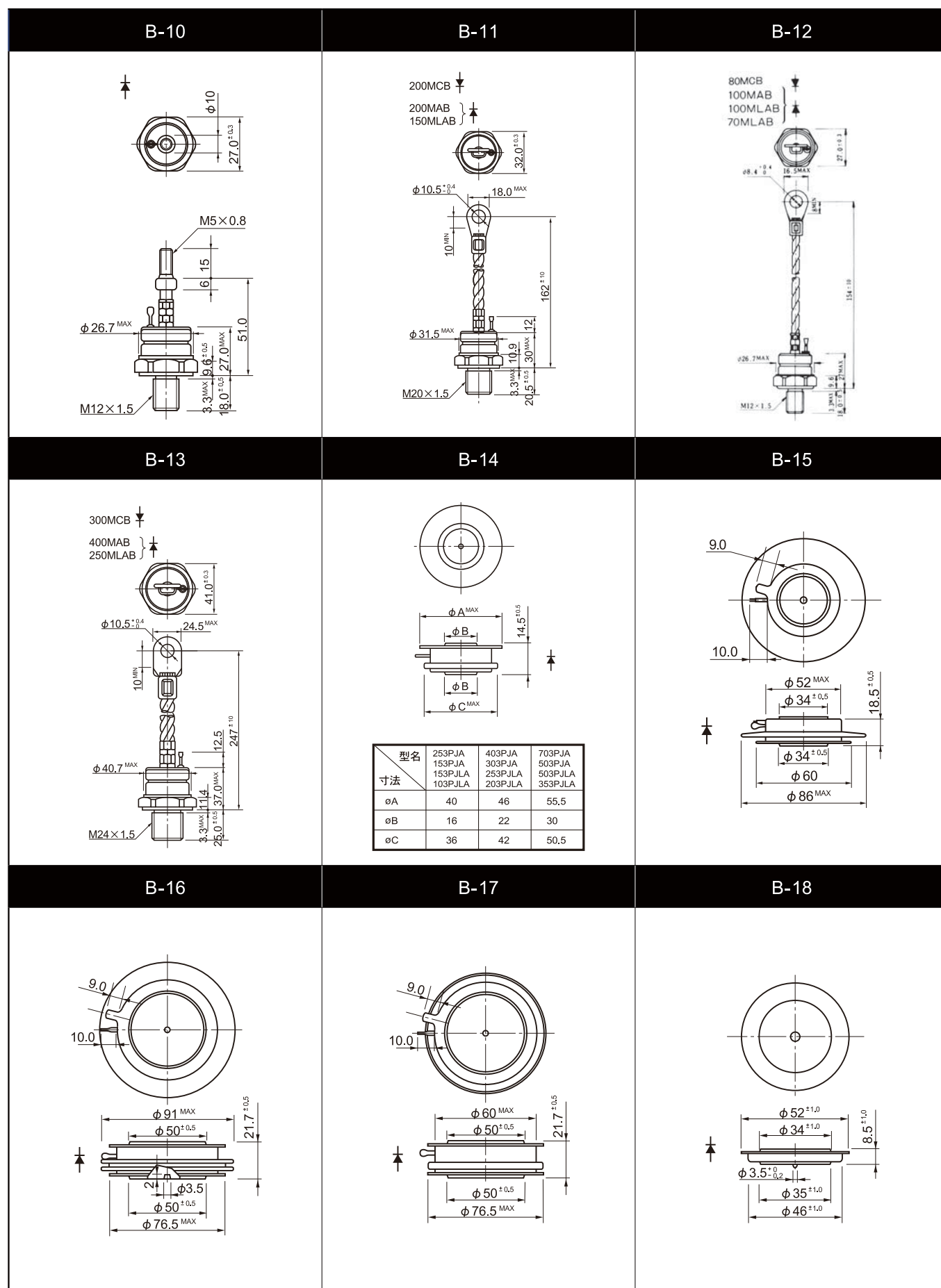
<A-24> TO-247



5. 外形寸法図 Outline

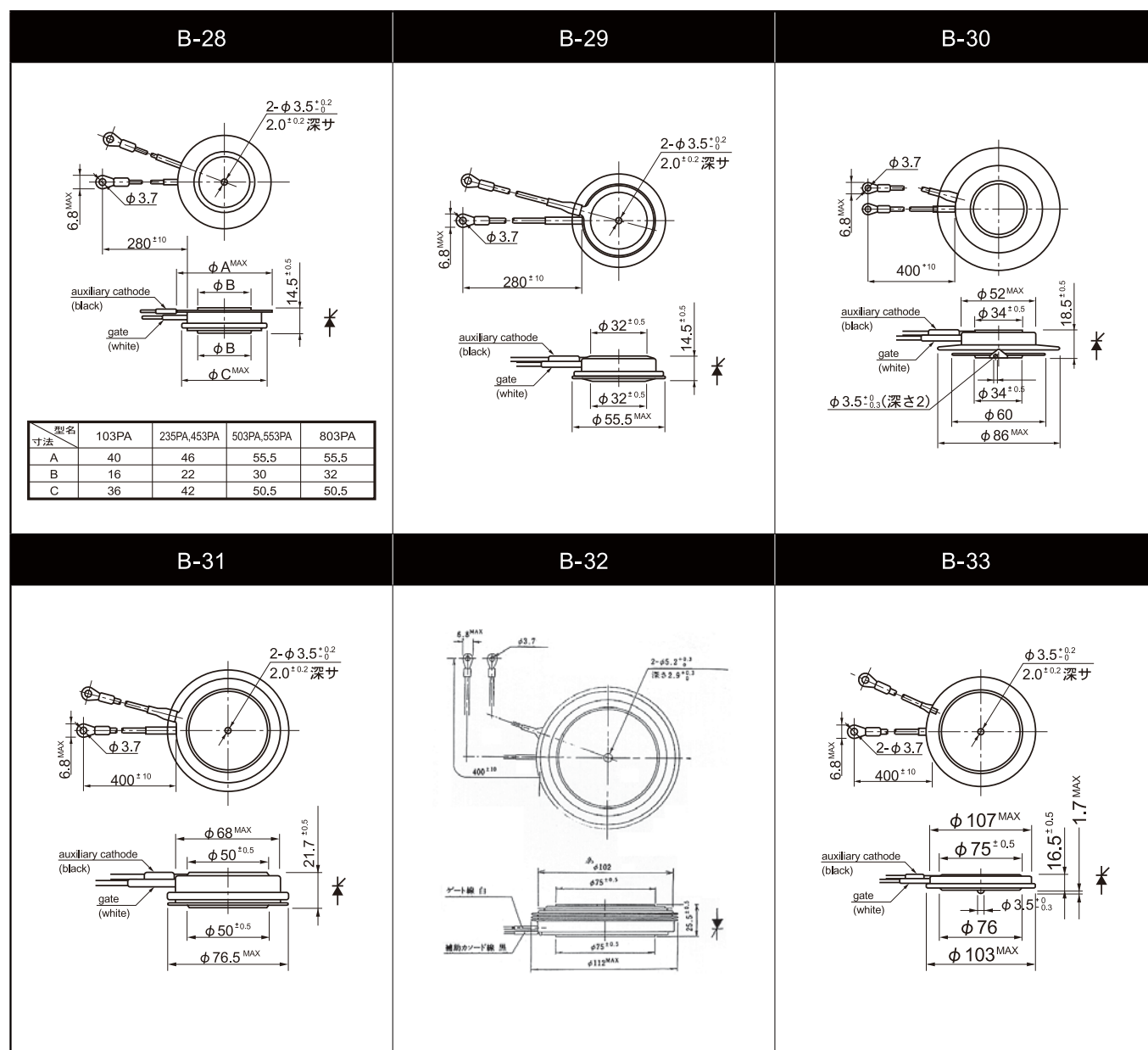


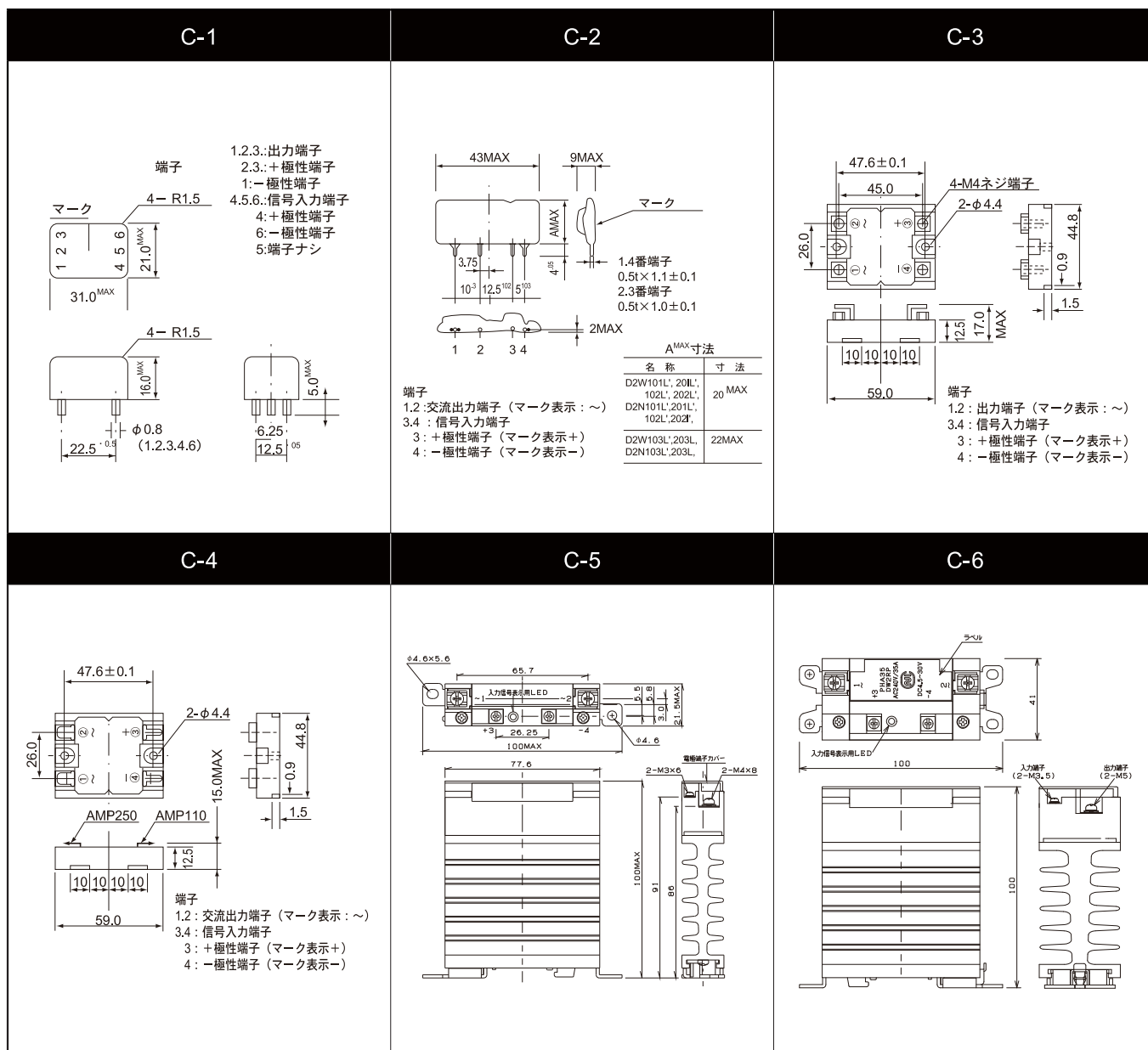
5. 外形寸法図 Outline



B-19	B-20	B-21
B-22	B-23	B-24
B-25	B-26	B-27

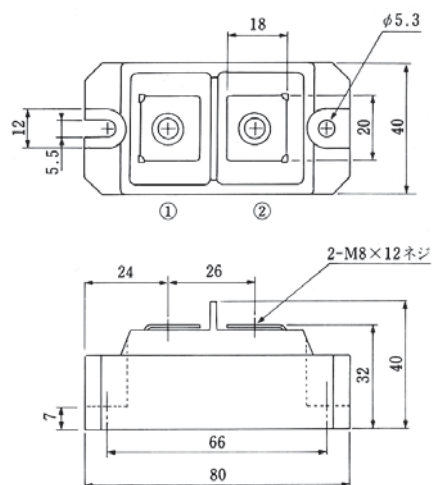
5. 外形寸法図 Outline



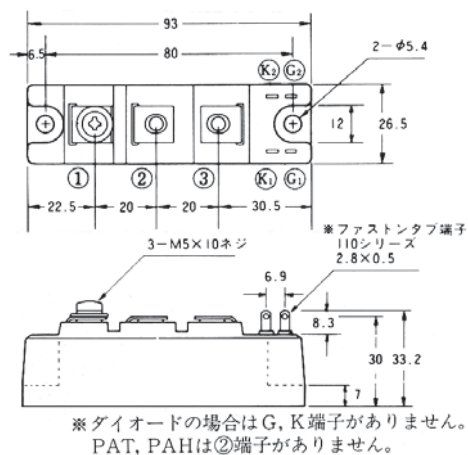


5. 外形寸法図 Outline

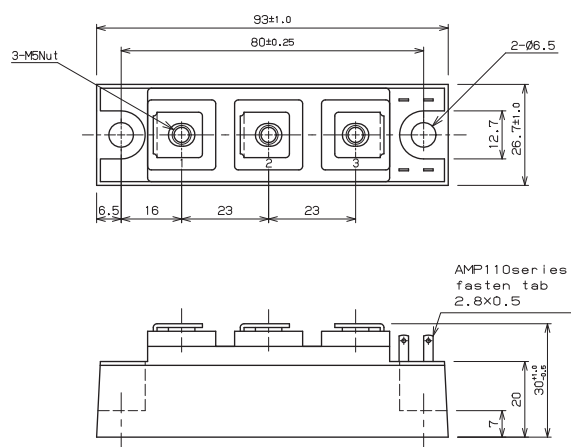
E-1



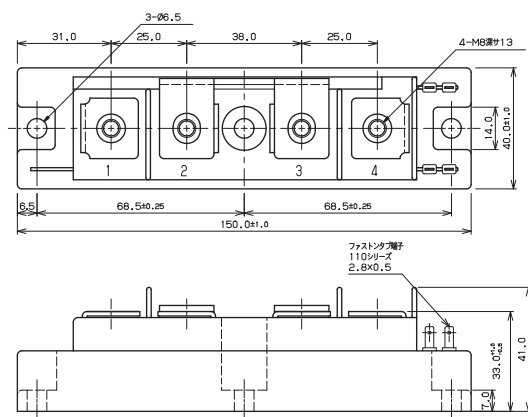
E-2



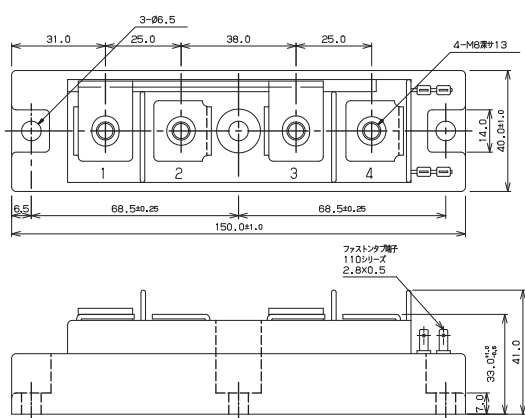
E-3



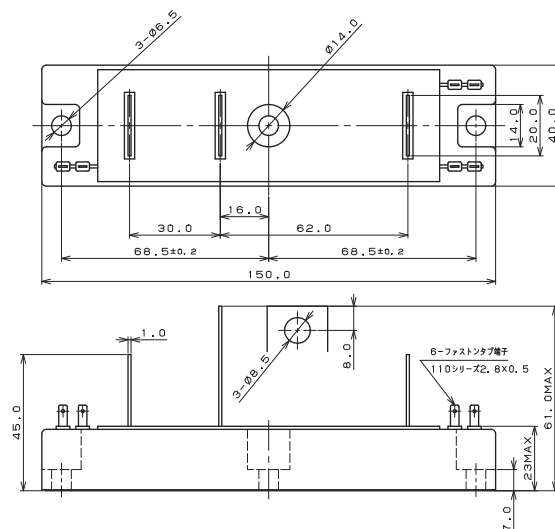
E-4



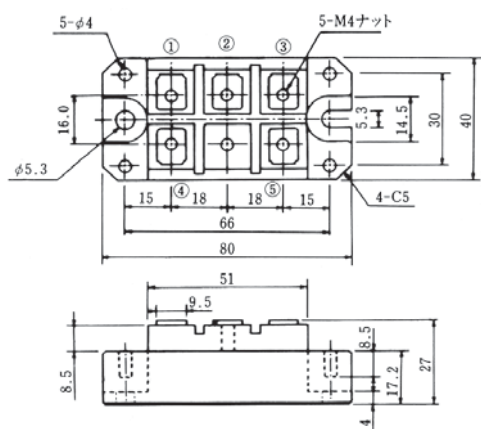
E-5



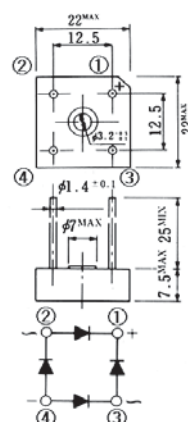
E-6



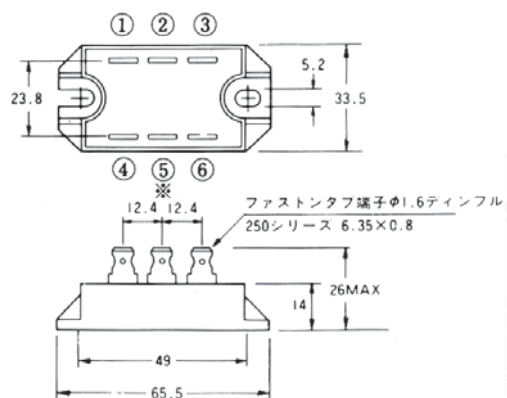
E-7



E-8

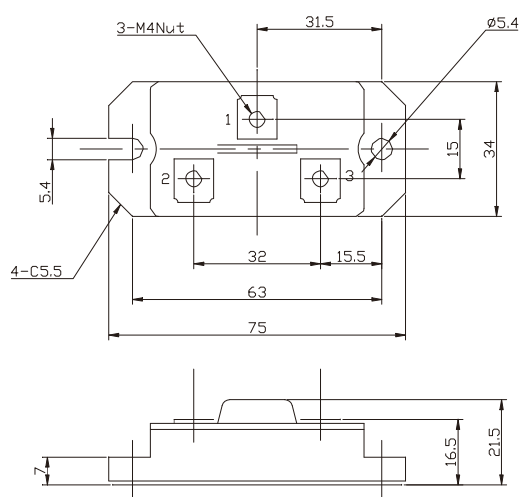


E-9

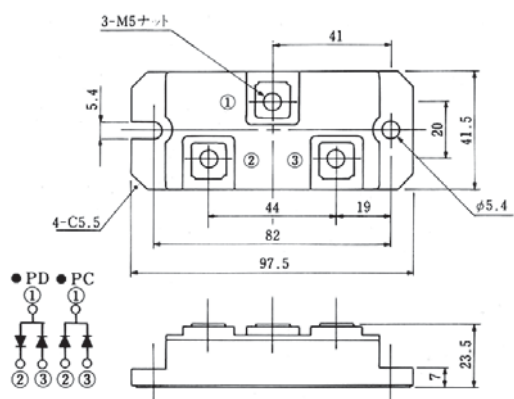


※PT3010の場合は⑤端子がありません。

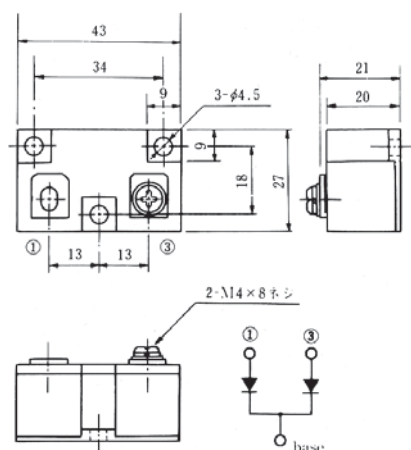
E-10



E-11

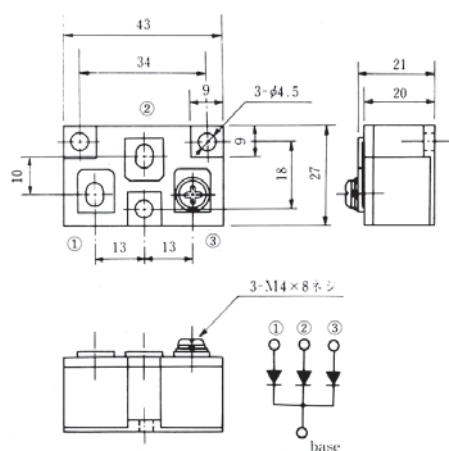


E-12

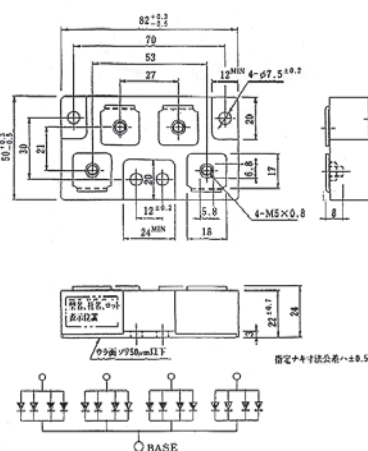


5. 外形寸法図 Outline

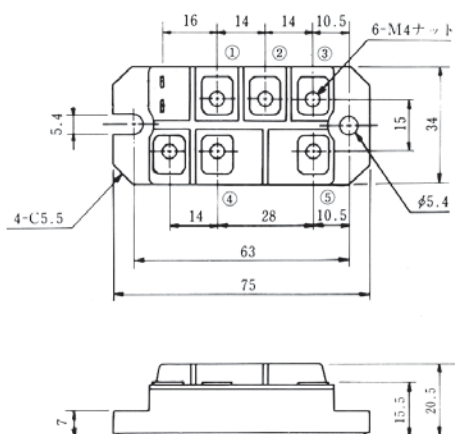
E-13



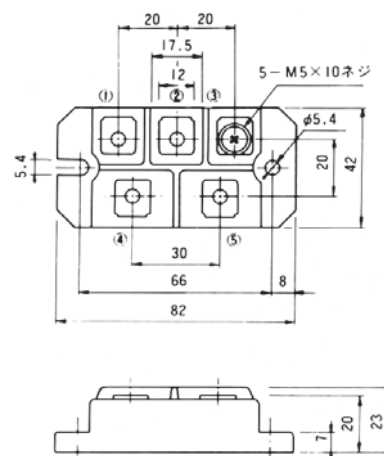
E-14



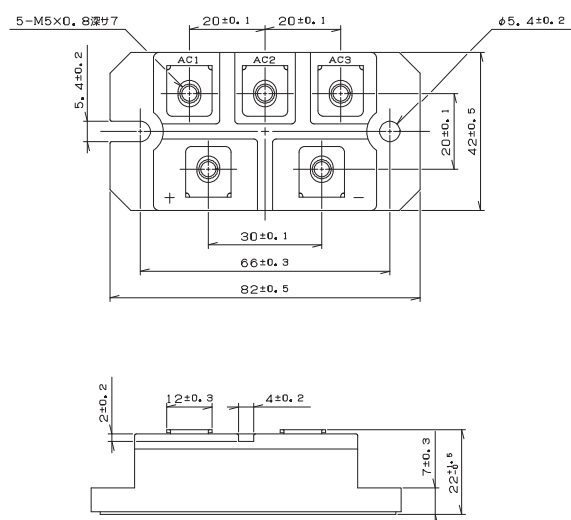
E-15



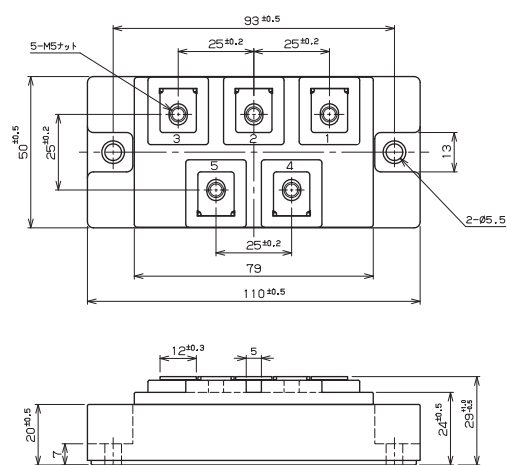
E-16



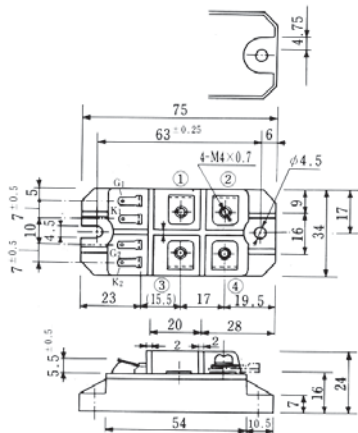
E-17



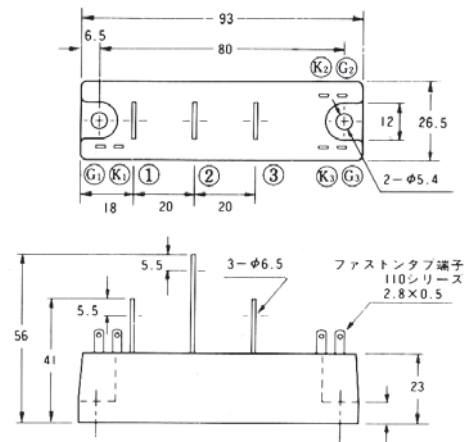
E-18



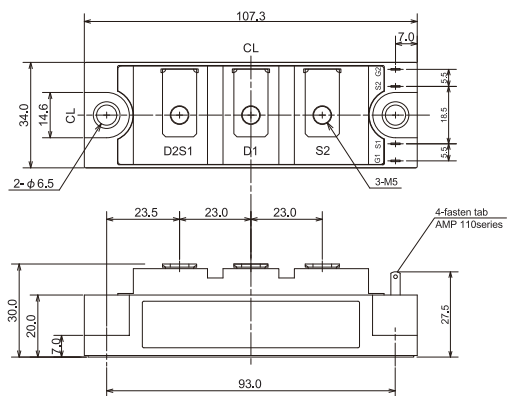
E-19



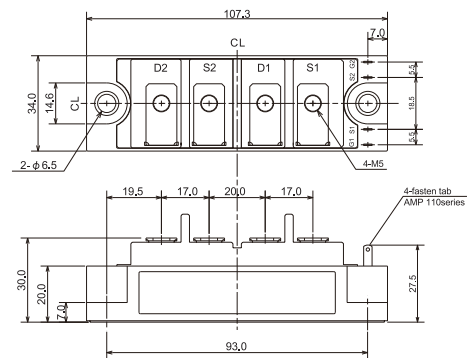
E-20



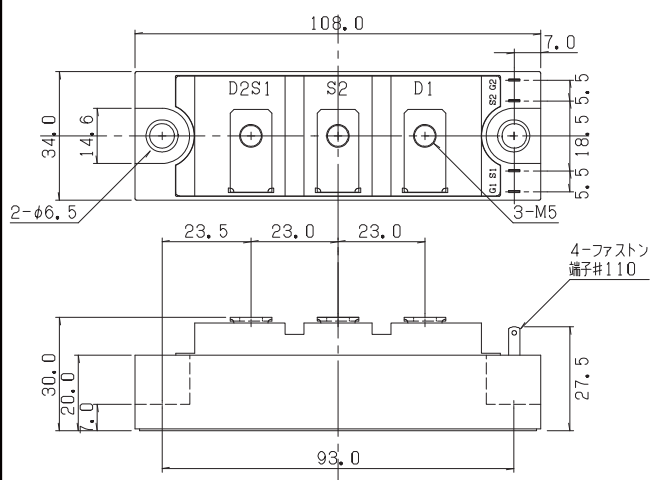
E-21



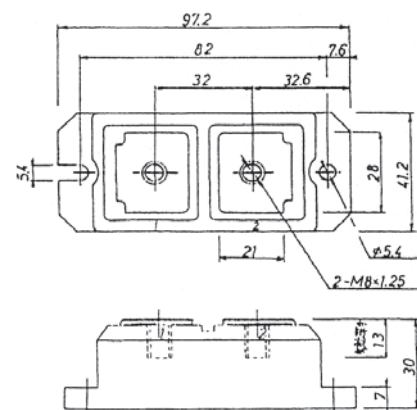
E-22



E-23

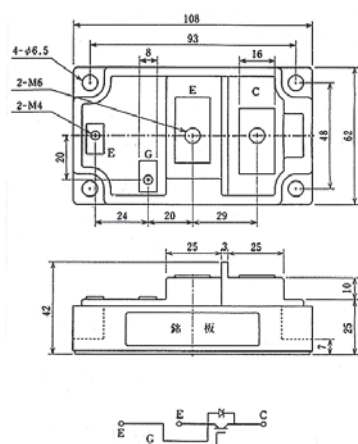


E-24

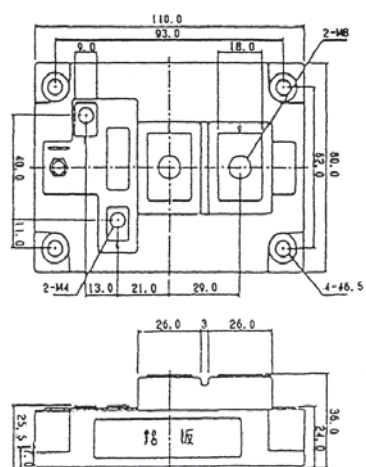


5. 外形寸法図 Outline

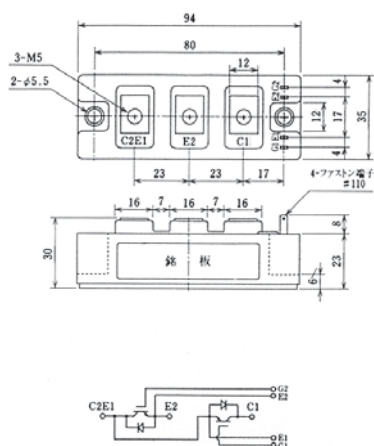
E-25



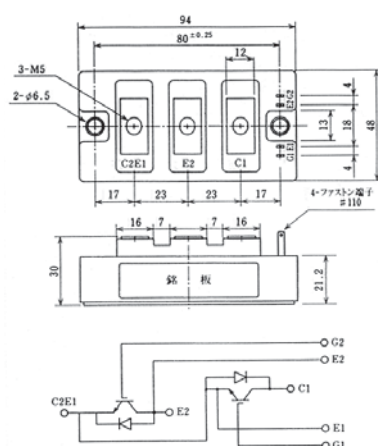
E-26



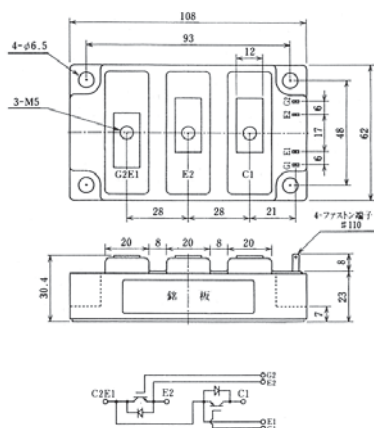
E-27



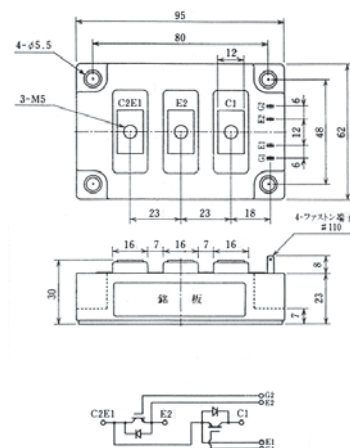
E-28



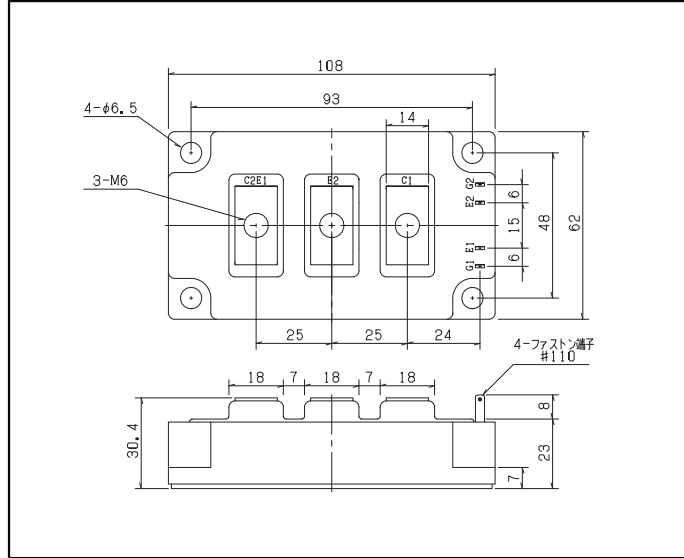
E-29



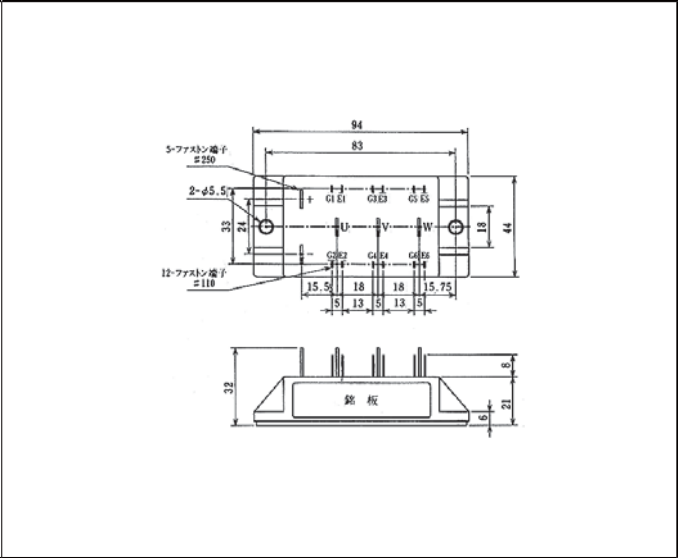
E-30



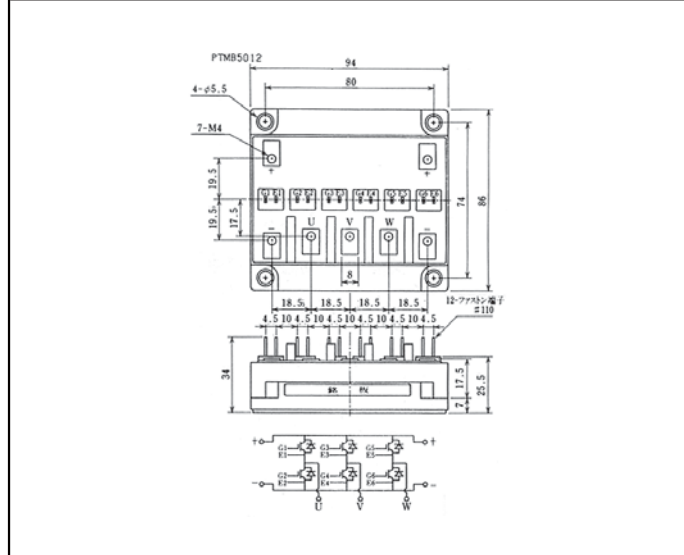
E-31



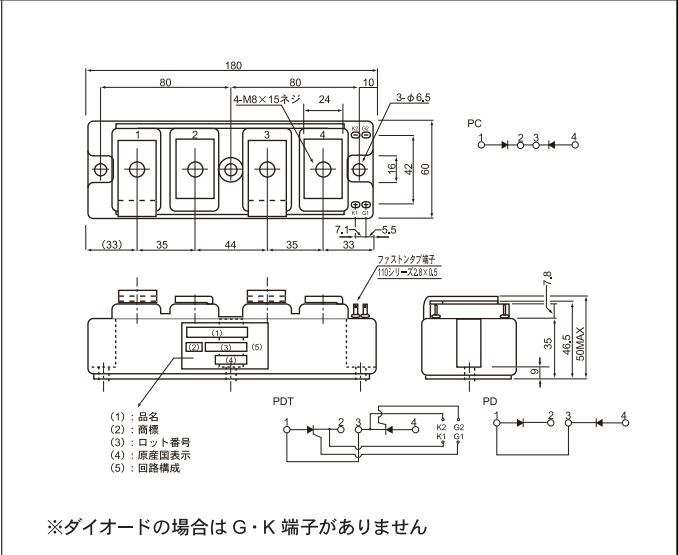
E-32



E-33

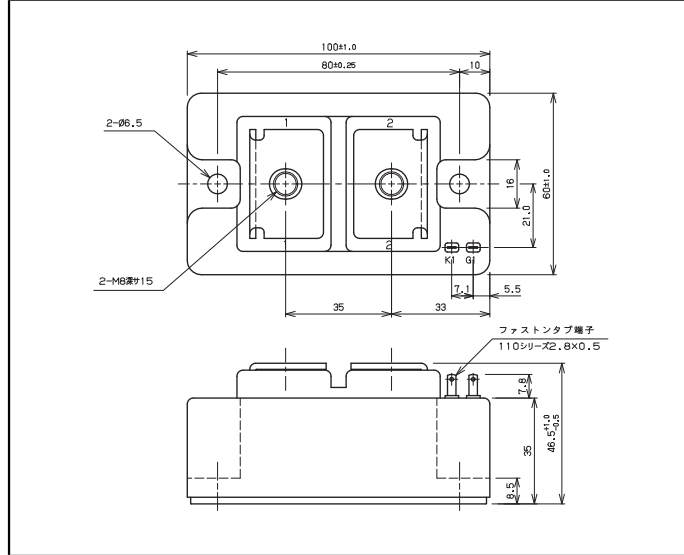


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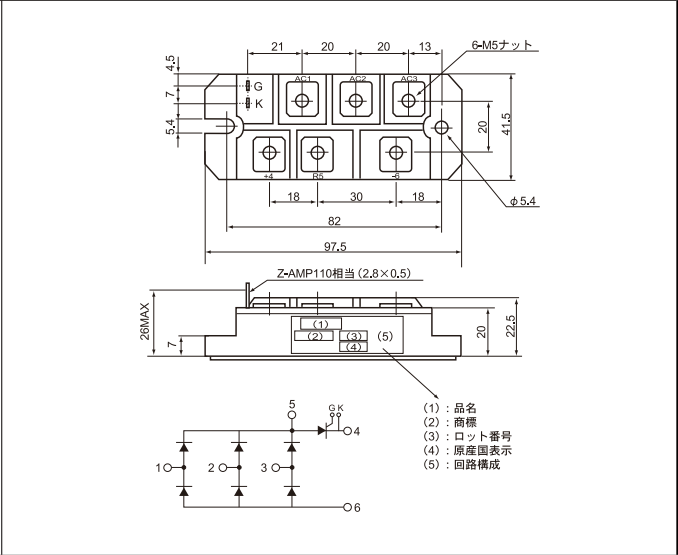


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E-35

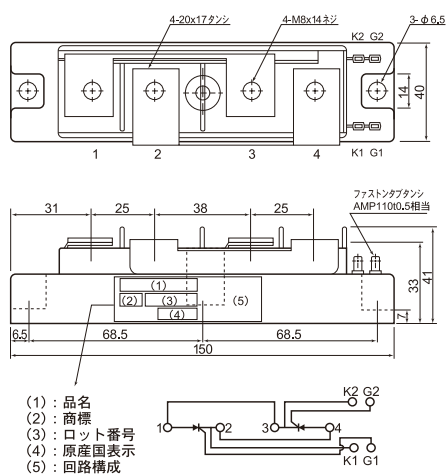


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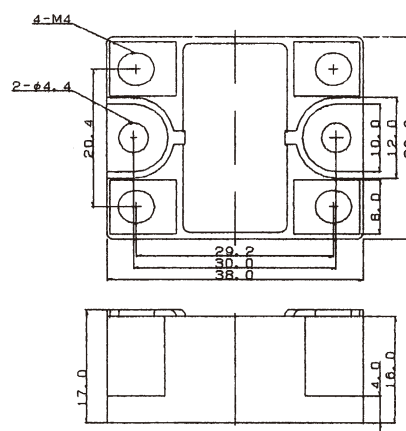


5. 外形寸法図 Outline

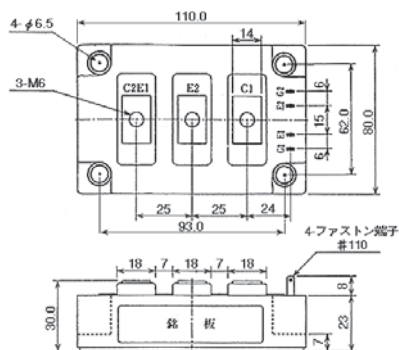
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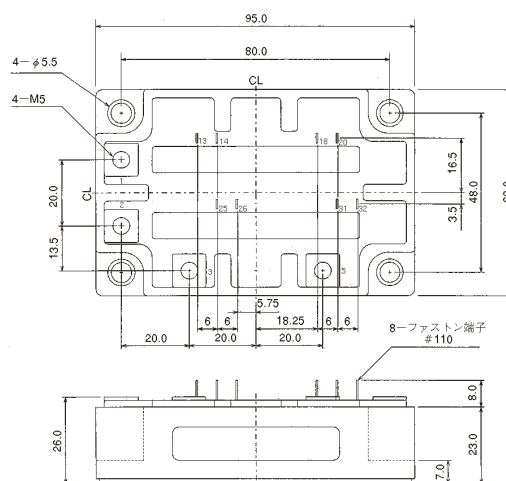
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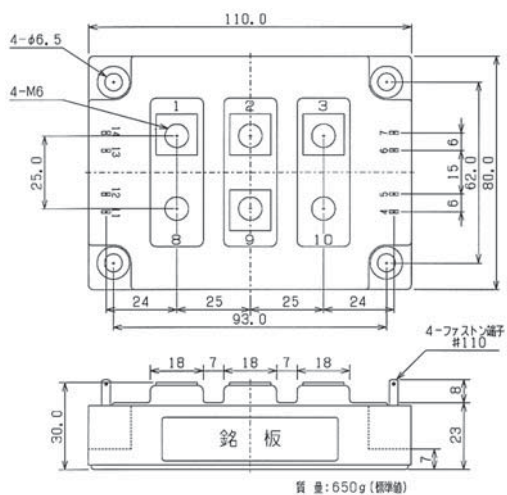
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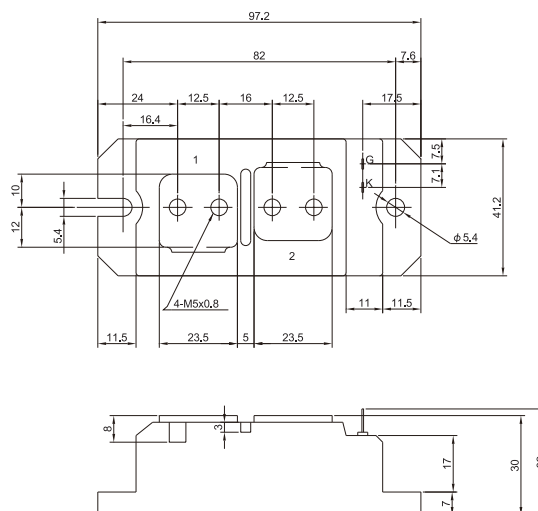
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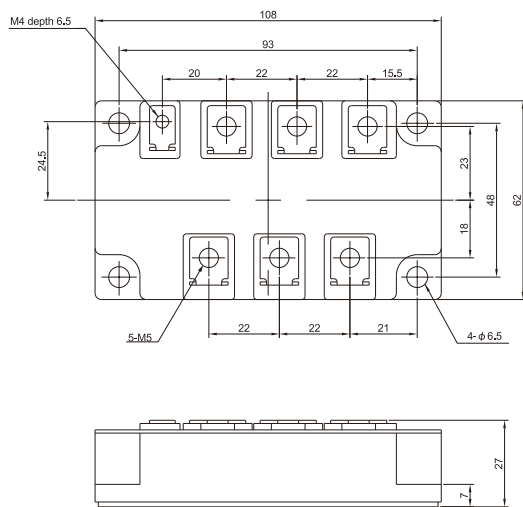
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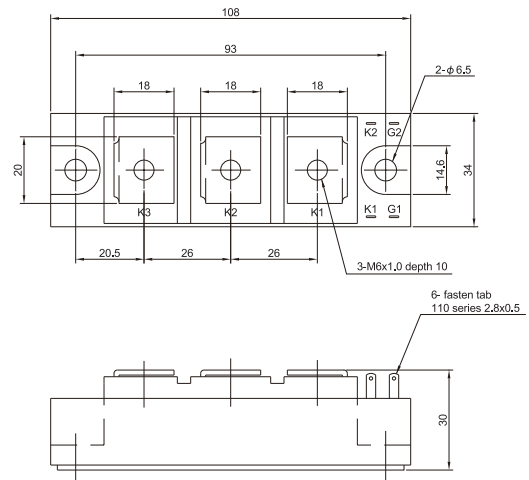
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E-43

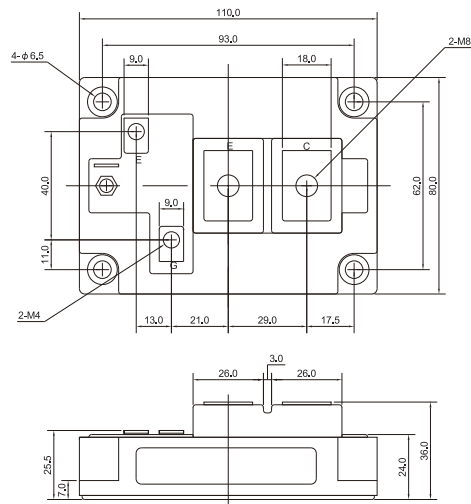


E-44

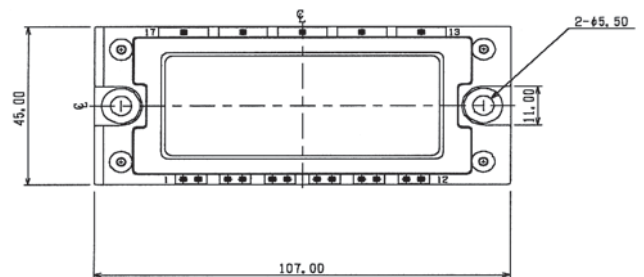


※ダイオードの場合は G・K 端子がありません

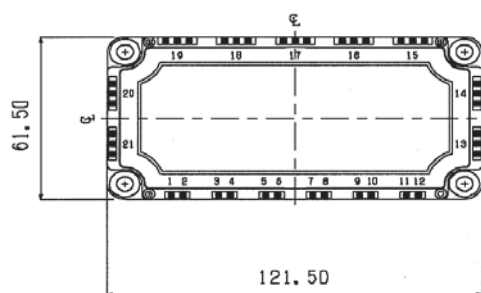
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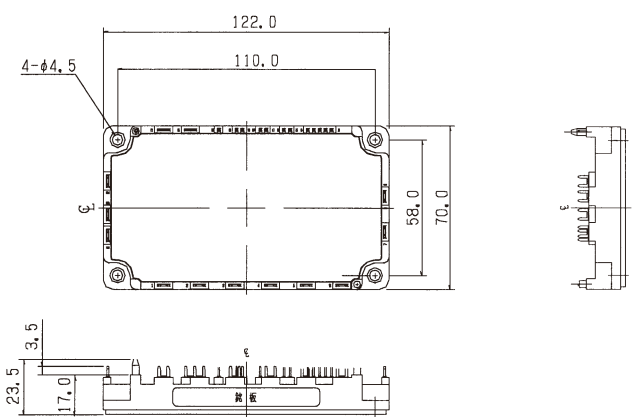
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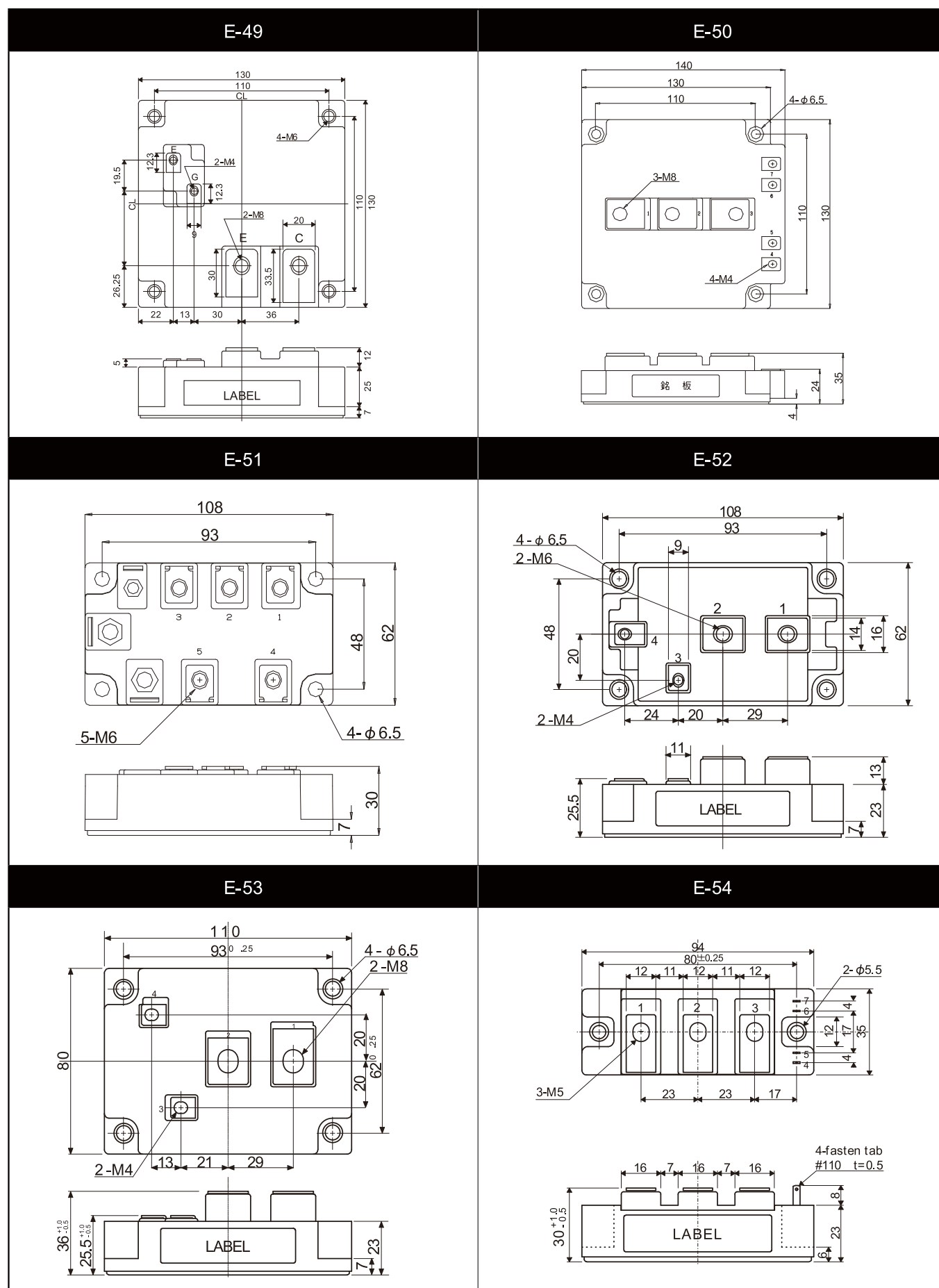
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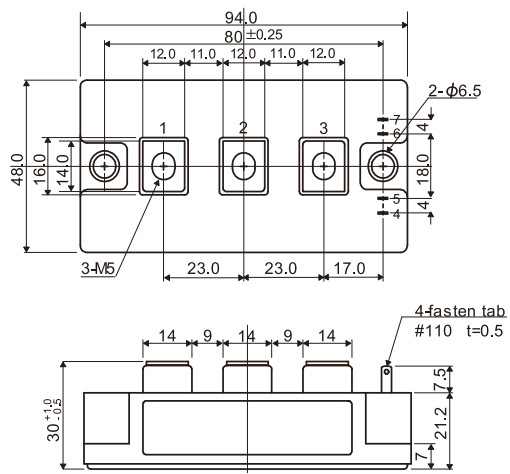
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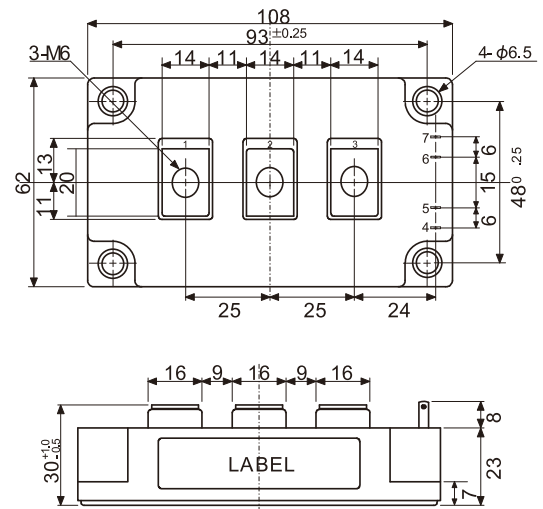
5. 外形寸法図 Outline



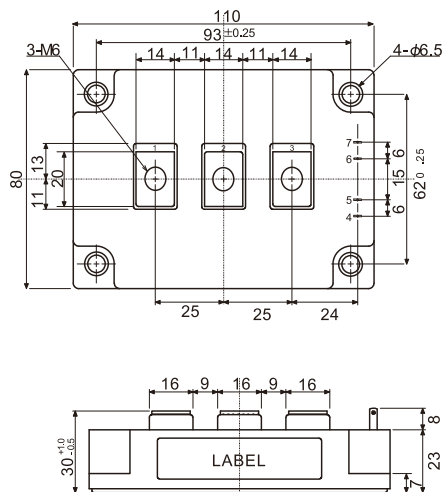
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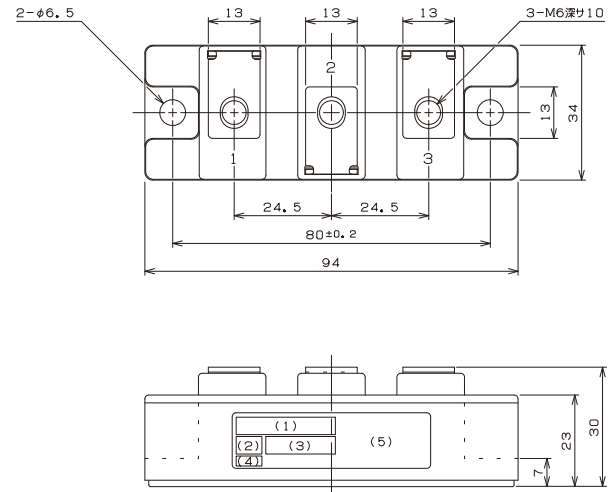
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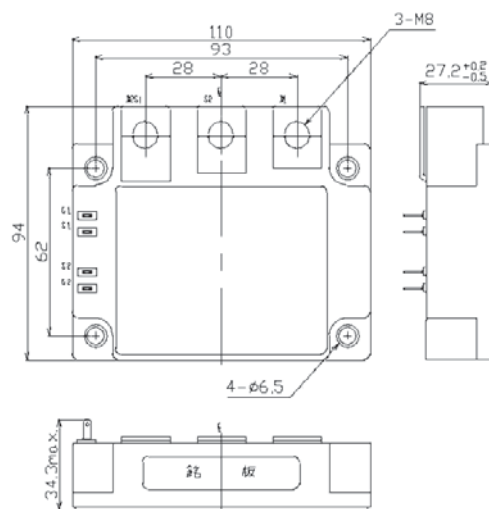
E-57



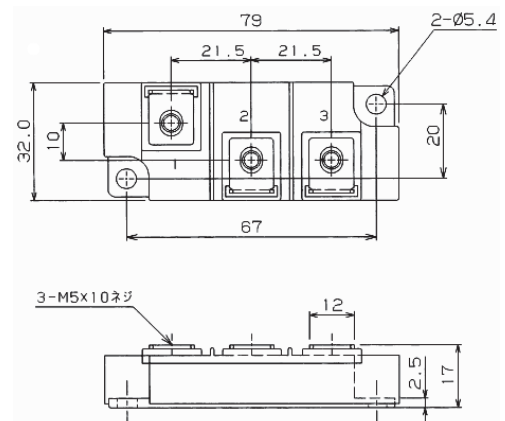
E-58



E-59



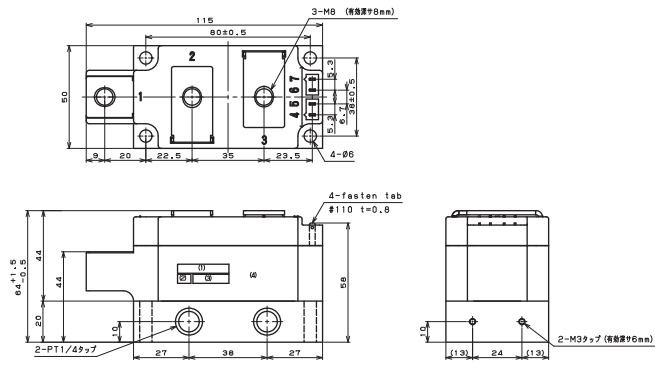
E-60



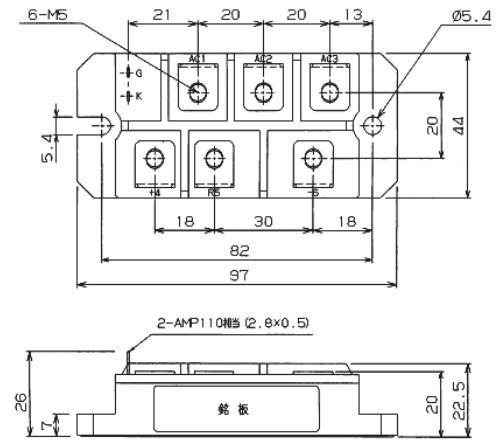
5. 外形寸法図 Outline

E-61	E-62
Technical drawing of terminal block E-61. Front view shows a 4-terminal block with dimensions: total width 89, terminal pitch 22.5, mounting hole pitch 15.5, mounting hole diameter 2-φ6.4, and terminal width 6.5. Side view shows a height of 17 and a base width of 76. Mounting holes are 3-M6x10 screws.	Technical drawing of terminal block E-62. Front view shows a 5-terminal block with dimensions: total width 80.5, terminal pitch 21.5, mounting hole pitch 21.5, mounting hole diameter 2-φ5.4, and terminal width 44. Side view shows a height of 17 and a base width of 67.5. Mounting holes are 5-M5x10 screws.
E-63	E-64
Technical drawing of terminal block E-63. Front view shows a 5-terminal block with dimensions: total width 91, terminal pitch 21.5, mounting hole pitch 21.5, mounting hole diameter 2-φ5.4, and terminal width 52. Side view shows a height of 17 and a base width of 79. Mounting holes are 5-M5x10 screws.	Technical drawing of terminal block E-64. Front view shows a 5-terminal block with dimensions: total width 82, terminal pitch 20, mounting hole pitch 20, mounting hole diameter φ5.4, and terminal width 42. Side view shows a height of 22 and a base width of 66. Mounting holes are 5-M5 nuts.
E-65	E-66
Technical drawing of terminal block E-65. Front view shows a 4-terminal block with dimensions: total width 93, terminal pitch 23, mounting hole pitch 16, mounting hole diameter 2-φ6.5, and terminal width 26.7. Side view shows a height of 30 and a base width of 80. Mounting holes are 3-M5 nuts.	Technical drawing of terminal block E-66. Front view shows a 4-terminal block with dimensions: total width 82, terminal pitch 20, mounting hole pitch 40, mounting hole diameter φ5.4, and terminal width 42. Side view shows a height of 22 and a base width of 66. Mounting holes are 4-M5 nuts.

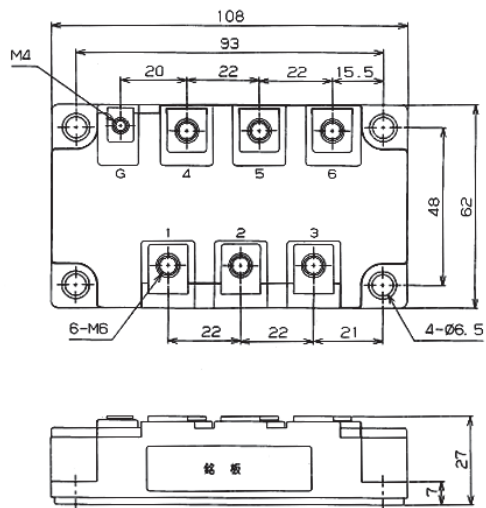
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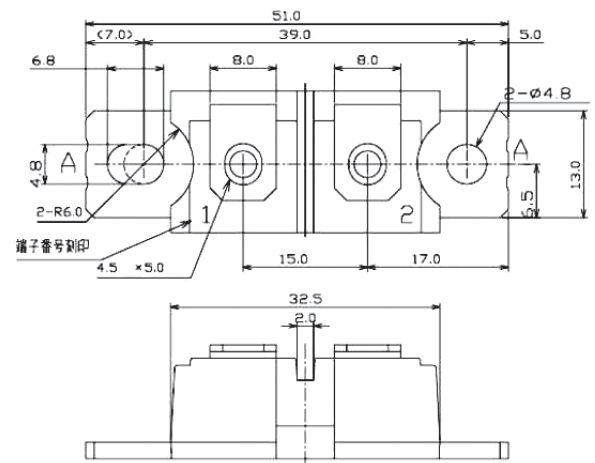
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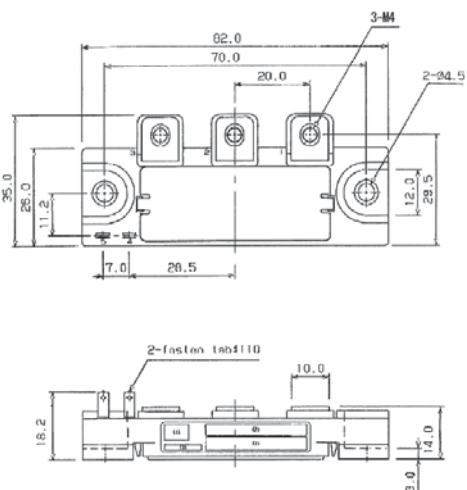
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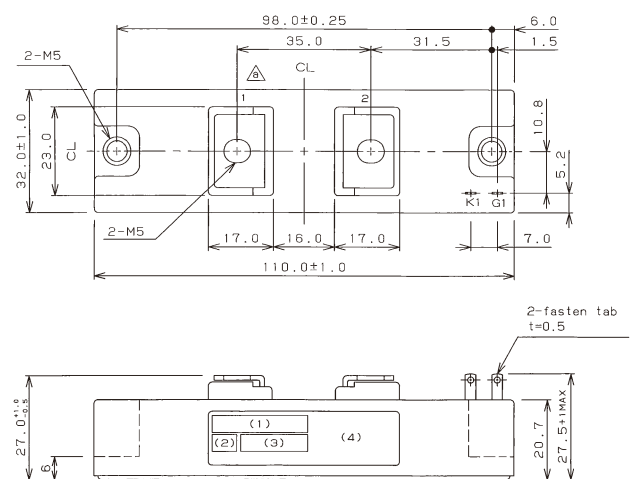
E-70



E-71

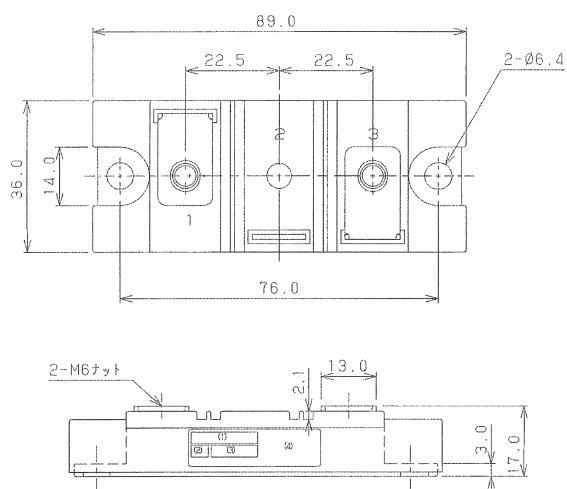


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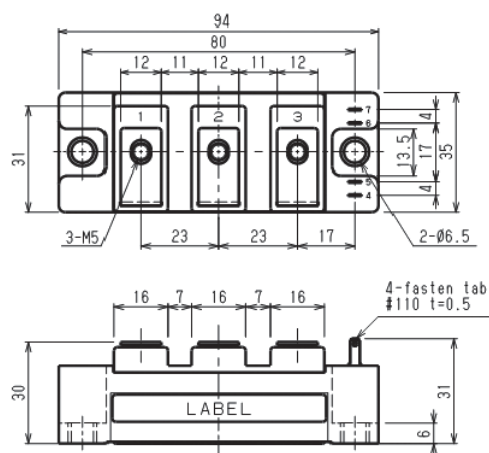


5. 外形寸法図 Outline

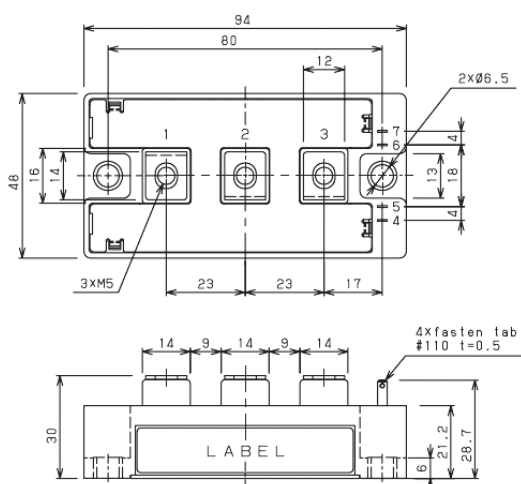
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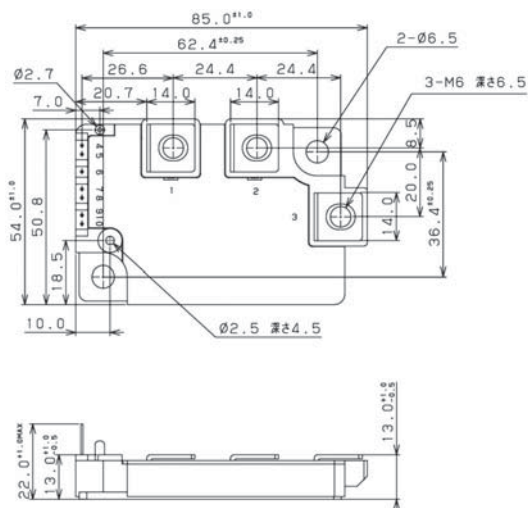
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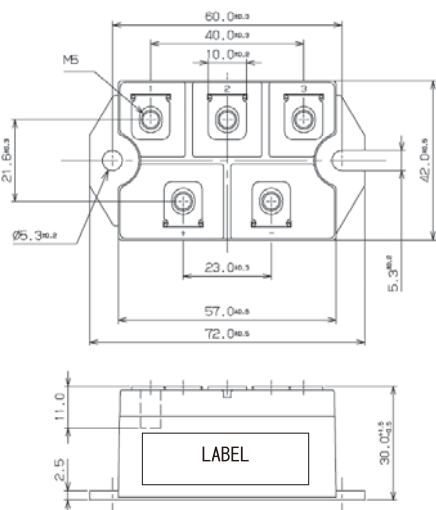
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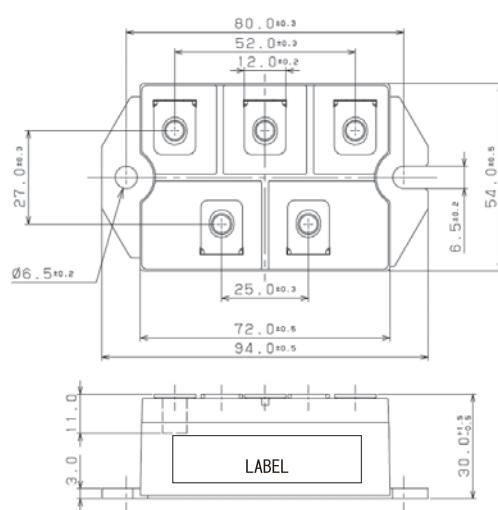
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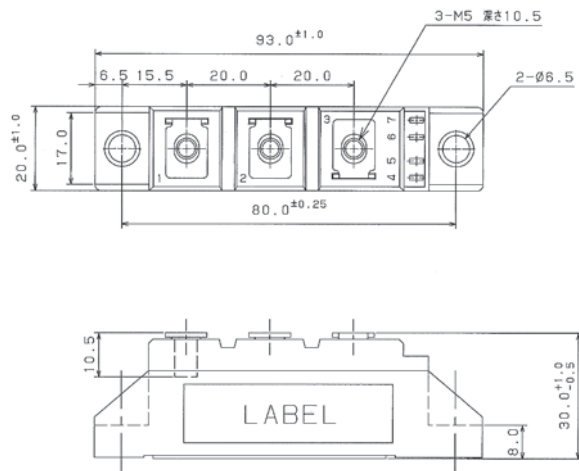
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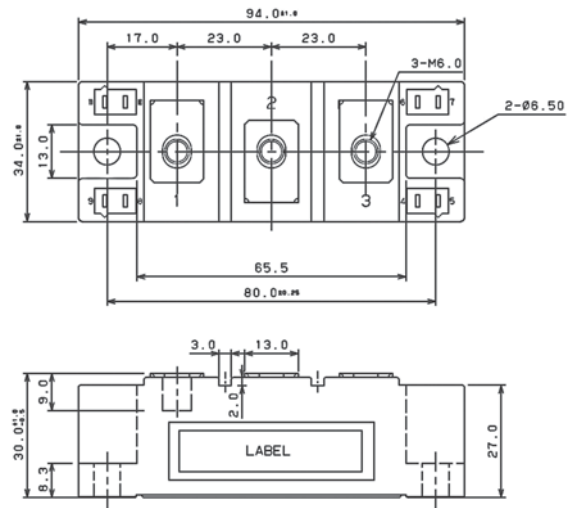
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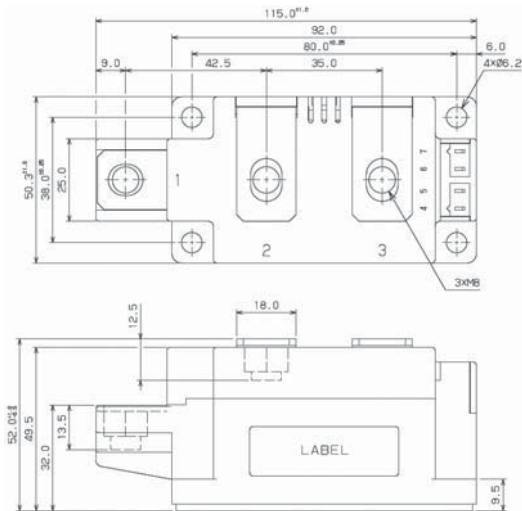
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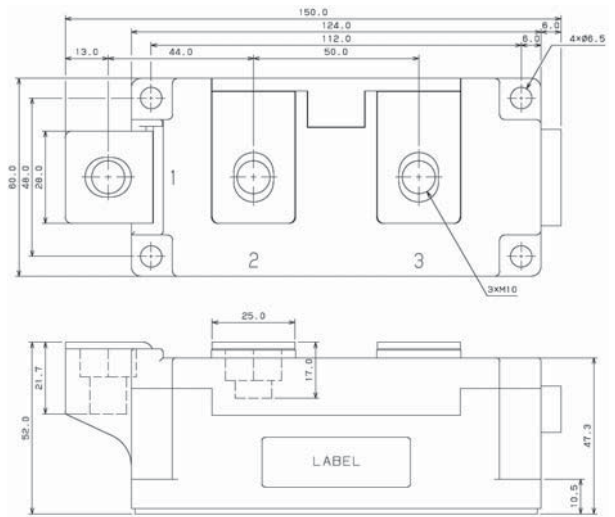
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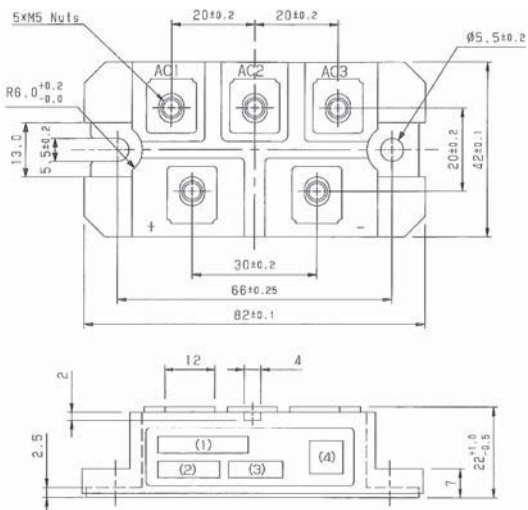
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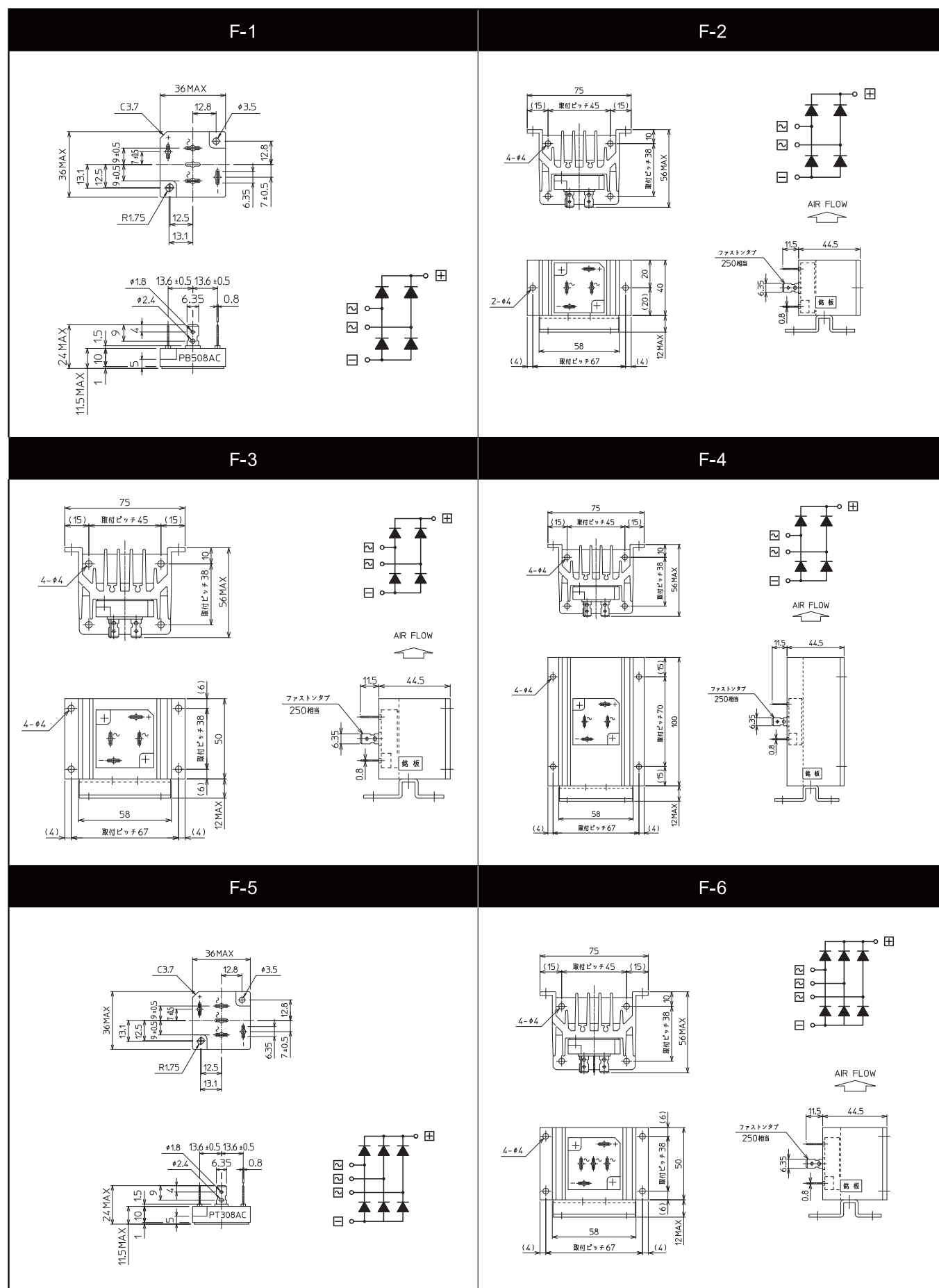
E-82



E-83



5. 外形寸法図 Outline



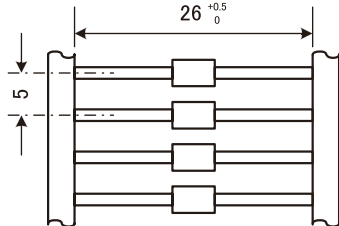
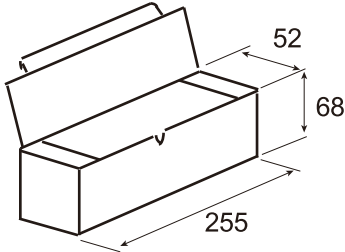
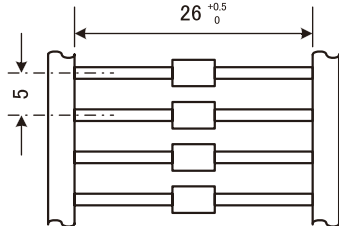
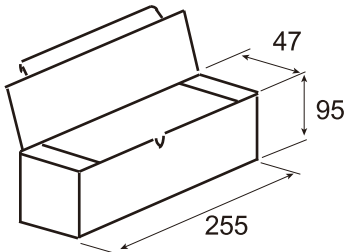
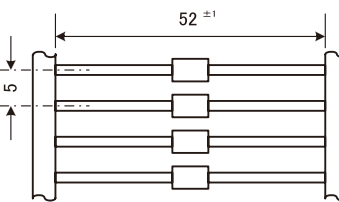
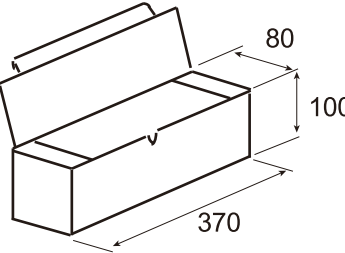
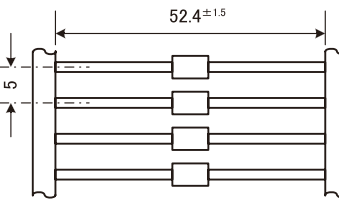
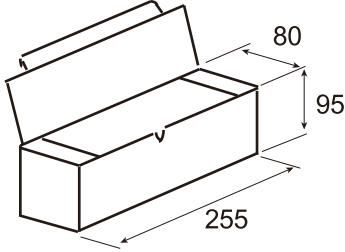
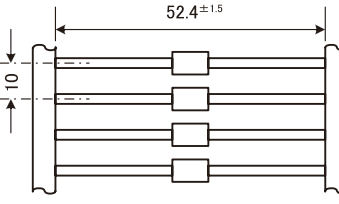
6. 梱包仕様 Packing Specifications

6-1. 最小梱包単位 / 最小発注数量 Minimum Contents Per Package/Minimum Order

Outline			梱包形態 Packaging Style	テーピング型名 Taping Code	最小梱包単位[個] Minimum Contents per Package [pcs.]	最小発注数量 [個] Minimum Order [pcs.]
Axial Lead Device	A-1	3Max× ø2.7 (DO-41S)	バルク Bulk in Plastic Bag	—	1,000	1,000
			つづら折りテーピング Tape & Ammunition Box	TA1B2	2,000	2,000
				TA2B5	5,000	5,000
	A-2	DO-204AC (DO-15)	バルク Bulk in Plastic Bag	—	100	1,000
			つづら折りテーピング Tape & Ammunition Box	TA1B2	1,800	1,800
				TA2B5	2,000	2,000
	A-3	DO-201AD	バルク Bulk in Plastic Bag	—	100	1,000
			つづら折りテーピング Tape & Ammunition Box	TA2B5	800	800
Surface Mounting Device	A-4	SOD-323FL	リールテーピング Tape & Reel	TE8L3	3,000	3,000
	A-5	SOD-123	リールテーピング Tape & Reel	TE8L3	3,000	3,000
	A-6	DO-214AC (SMA)	リールテーピング Tape & Reel	TE12L	1,500	1,500
	A-7	NA (DO-221BC)	リールテーピング Tape & Reel	TE12L	3,000	3,000
	A-8	NB	リールテーピング Tape & Reel	TE12L	1,500	1,500
	A-9	nSMC	リールテーピング Tape & Reel	TE16L	3,000	3,000
	A-10	TO-277	リールテーピング Tape & Reel	TE16L3	3,000	3,000
	A-12	TO-252 (Dpak)	リールテーピング Tape & Reel	TE16L3	3,000	3,000
	A-21	TO-263 (D2pak)	スティック Plastic Tube	—	50	100
			リールテーピング Tape & Reel	TE24L1	1,000	1,000
	A-22	TO-263LP	リールテーピング Tape & Reel	TE24L2	2,000	2,000
	A-11	TO-251	スティック Plastic Tube	—	75	75
Through hole Device	A-19 A-20	TO-262	スティック Plastic Tube	—	50	100
	A-14 A-15 A-16 A-17 A-18	TO-220 TO-220 Full-Mold	スティック Plastic Tube	—	50	100
	A-23 A-24	TO-247	スティック Plastic Tube	—	25	100
	A-25 A-26	TO-247 (long lead)	スティック Plastic Tube	—	25	100

6. 梱包仕様 Packing Specifications

6-2. つづら折りテーピング仕様 Tape & Ammunition Box

テーピング型名 Taping Code	Outline		テーピング形状および寸法 Tape Dimensions (mm)	包装形態および寸法 Box Dimensions (mm)	最小梱包単位 (個) Minimum Contents per Package (pcs)
TA1B2	A-1	3Max × Ø2.7 (DO-41S)			2,000
	A-2	DO-204AC (DO-15)			1,800
TA2B5	A-1	3Max × Ø2.7 (DO-41S)			5,000
	A-2	DO-204AC (DO-15)			2,000
	A-3	DO-201AD			800

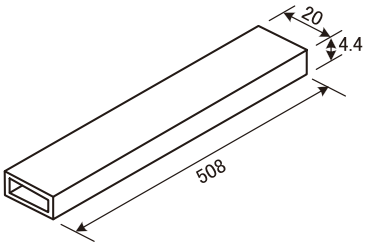
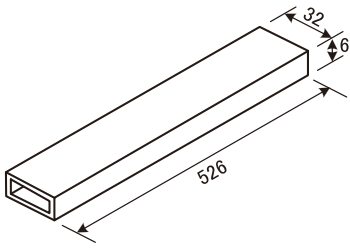
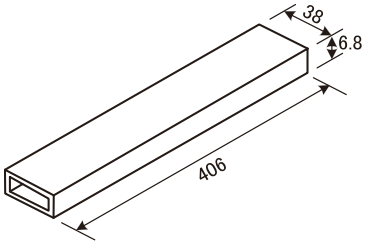
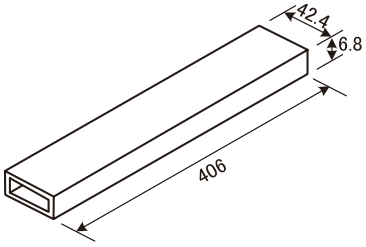
テーピング型名 Taping Code	Outline		テーピング形状および寸法 Tape Dimensions (mm)	包装形態および寸法 Box Dimensions (mm)	最小梱包単位 (個) Minimum Contents per Package (pcs)
TE8L3	A-4	SOD-323FL			3,000
TE8L3	A-5	SOD-123			3,000
TE12L	A-6	DO-214AC (SMA)			1,500
TE12L	A-7	NA (DO-221BC)			3,000
TE12L	A-8	NB			1,500

6. 梱包仕様 Packing Specifications

6-3. リールテーピング仕様 (2/2) Embossed Carrier Tape & Reel (2/2)

テーピング型名 Taping Code	Outline		テーピング形状および寸法 Tape Dimensions (mm)	包装形態および寸法 Box Dimensions (mm)	最小梱包単位 (個) Minimum Contents per Package (pcs)
TE16L	A-9	nSMC			3,000
TE16L3	A-10	TO-277			3,000
TE16L3	A-12	TO-252 (Dpak)			3,000
TE24L1	A-21	TO-263 (D2pak)			1,000
TE24L2	A-22	TO-263LP			2,000

6-4. スティック仕様 Plastic Tube

Outline		スティック形状および寸法 Tube Dimensions (mm)	最小梱包単位 (個) Minimum Contents per Package (pcs)
A-11 A-12	TO-251 TO-252 (Dpak)		75
A-13 A-14 A-15 A-17 A-19 A-20	TO-220 TO-220 Full-Mold TO-262		50
A-23 A-24	TO-247		25
A-25 A-26	TO-247 (long lead)		25



当カタログに記載の情報は 2018 年 5 月時点のものです。
The information contained in this catalog is current as of May 2018.

<https://www.kyocera.co.jp>
<https://global.kyocera.com>

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