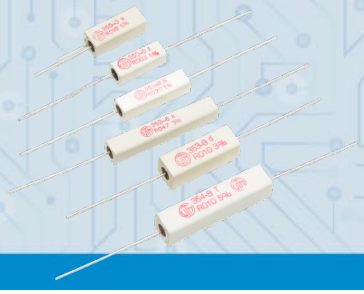


VITROHM
a YAGEO company

KNC Series Datasheet

Power Shunt Resistor | Axial | Low Inductance and Low Ohmic | Ceramic case

ORDERING CODE - Example

New SAP Part Nr.:

KNC	600	J	B	-	AX-	0R056	AA
Serie	Power rating	Tol.	Pack-Code	TCR	Forming type	R Value	Special
		F = ±1% **G** = ±2% **H** = ±3% **J** = ±5%	**B** = Bulk **R** = Tape Reel	- Base on spec.	**AX-** = Axial **73-** Inner Taping dimension or **83-** Inner Taping dimension		**AA** = Standard

Historical VTM Part Nr.:

KN351 – 8	5	B	0R056
Type	Tol.	Pack-Code	R Value

APPLICATIONS

- Automotive
- Industrial
- Power & Energy

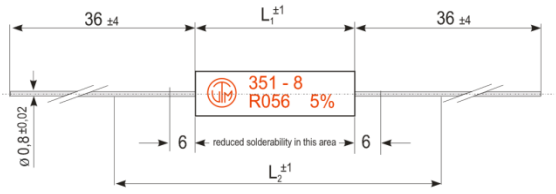
FEATURES

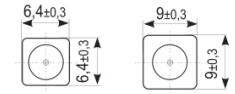
- All welded construction
- Very low inductance
- High power to size ratio
- Good overload and heat dissipation capability
- Bending options available
- RoHS & REACH Compliant

ELECTRICAL SPECIFICATIONS

Type			KNC500	KNC600	KNC800	KNC900	KNC10A
Historical Part Number			KN350 - 8	KN351 - 8	KN352 - 8	KN353 - 8	KN354 - 8
Nominal Power Rating P_{70}	[W]		See next page				
Resistance Range (Other values upon request)	[Ω]	Min.	0R003	0R004	0R005	0R004	0R005
		Max.	0R051	0R068	0R1	0R068	0R1
E-Series (preferred)			E24 >0R01 (Other upon request)				
Tolerances	±[%]		F = 1% ; G = 2% ; H = 3% ; J = 5%				
Temperature Coefficient	$\pm[10^{-6}*K^{-1}]$		+200 ... +1200 (Depends on value)				
Working Temperature Range	[ºC]		-55 ... +250				
Thermal Resistance	$[KW^{-1}]$		65	50	38	20	18
Insulation Resistance IEC60115-1 clause 4.6	[MΩ]		$> 10^4$				
Max. Working Voltage	$[V]_{RMS}$		$\sqrt{P_{70} \times R}$				
Dielectric Withstanding Voltage IEC60115-1 clause 4.7 (1[min])	$[V]_{RMS}$		2000				

DIMENSIONS [mm]





KNC500...KNC800 KNC900...KNC10A

New P/Nr. Type	*Historical P/N:*	L_1	L_2
KNC500	KN350 - 8	**18** ±1,0	**40**
KNC600	KN351 - 8	**25** ±1,0	**45**
KNC800	KN352 - 8	**38** ±1,0	**60**
KNC900	KN353 - 8	**25** ±1,0	**45**
KNC10A	KN354 - 8	**38** ±1,0	**60**

Measuring length L_2: Resistance value is measured over the centered length L_2 on terminals free of oxide and contaminations. Differing conditions require adequate corrections ($R_{terminal}$ = 0,4 mΩ/cm).

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KNC Series Datasheet

PERFORMANCE DATA

Type		KNC500	KNC600	KNC800	KNC900	KNC10A
Historical Part Number		KN350 - 8	KN351 - 8	KN352 - 8	KN353 - 8	KN354 - 8
Derating Linear	[°C]	70…250 (0W)				
Climatic Category		55/200/56				
Failure Rate *(Total, ϑ_0, max, 60[%] cont. lev.)*	[10^{-9*} h^{-1}]	appr. 10 depends on value				
Endurance *IEC60115-1 clause 4.25* *(P_{70}, @ 70[°C], 1000[h])*	±[%]	3				
Damp Heat, Steady State *IEC60115-1 clause 4.24* *(40[°C], 93[% r.h.], 56[d])*	±[%]	0,5				
Climatic Sequence *IEC60115-1 clause 4.23*	±[%]	0,5				
Resistance to Soldering Heat *IEC60115-1 clause 4.18* *($260^{\pm5}$[°C], $3,5^{\pm1}$[s])*	±[%]	0,2				
Terminal Strength	±[%]	0,5				
Terminal Tensile Strength	[N]	≥ 25				
Solderability *IEC60068-2-20* *($245^{\pm5}$[ºC] $3^{\pm0.5}$[s])*		Solder bath method (> 95% coverage)				
Marking *IEC60062*		Printed in clear				

ELECTRICAL CHARACTERISTICS

Nominal Power Rating [W]			
New P/Nr. Type	Historical P/Nr:	**Resistance Value**	**Rated Power [W] $P_{70ºC}$**
KNC450	KN350 - 8	0R003	4,5
KNC500		0R004 … 0R051	5,0
KNC600	KN351- 8	0R004 … 0R068	6,0
KNC800	KN352 - 8	0R005 … 0R1	8,0
KNC900	KN353 - 8	0R004 … 0R068	9,0
KNC10A	KN354 - 8	0R005 … 0R1	10,0

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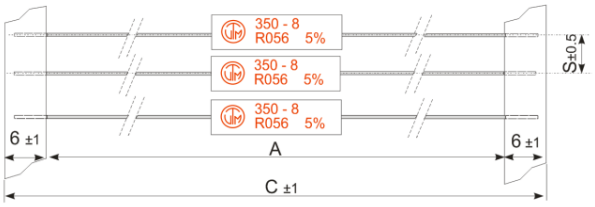
KNC Series Datasheet

PACKAGING

The standard packaging for KNC in axial type is bulk, dimensions below.



ALTERNATIVE LEAD CONFIGURATIONS

This type KNC is also available in a different pre-forming, as shown below, other's upon request.

New P/Nr. Type	*Historical P/N:*	Pack Code	Pieces	***Forming Type***
KNC500	KN350- 8	**B** = Bulk	200	**AX-** = Axial
KNC600	KN351- 8		200	
KNC800	KN352 - 8		200	
KNC900	KN353 - 8		200	
KNC10A	KN354 - 8		100	

New P/Nr. Type	*Historical P/N:*	***Pack Code***	Pieces	***Forming Type*** *(Inner Taping dim.)*	A	C	S
KNC500	KN350- 8	**R** = Taped in Reel	1000	**73-** or **83-**	73	85	10
KNC600	KN351- 8		1000		83	95	10
KNC800	KN352 - 8		1000		83	95	10
KNC900	KN353 - 8		500		83	95	10
KNC10A	KN354 - 8		500		83	95	10

THROUGH HOLE VERSION

			
Axial Goal Post (AG-)	Axial Goal Post Kink (AK-)	Radial (RD-)	Radial 2 Kink (RK-)

For horizontal and vertical pre-forming please consult your local sales contact.

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