

GYA

Chip Type, 125°C High Reliability



For SMD



High Ripple Current



Low Impedance



Long Life



Anti-Solvent Feature

NEW

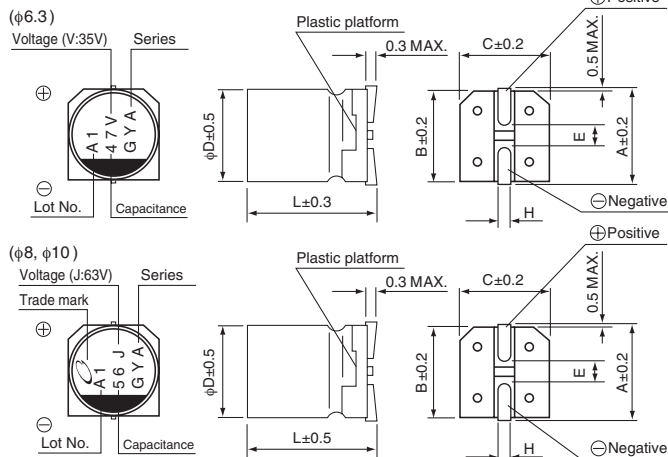
- High Reliability, Low ESR, High ripple current.
- Long life of 4000 hours at 125°C.
- Adapted to the RoHS directive (2011/65/EU).



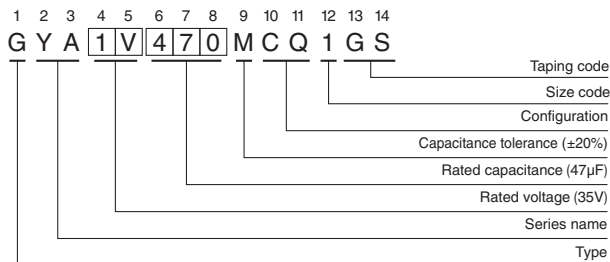
Specifications

Item	Performance Characteristics															
Category Temperature Range	-55 to +125°C															
Rated Voltage Range	25 to 63V															
Rated Capacitance Range	10 to 330μF															
Capacitance Tolerance	± 20% at 120Hz, 20°C															
Tangent of loss angle (tan δ)	<table><tr><td>Rated voltage (V)</td><td>25</td><td>35</td><td>50</td><td>63</td></tr><tr><td>tan δ (MAX.)</td><td>0.14</td><td>0.12</td><td>0.10</td><td>0.08</td></tr></table>	Rated voltage (V)	25	35	50	63	tan δ (MAX.)	0.14	0.12	0.10	0.08	120Hz 20°C				
Rated voltage (V)	25	35	50	63												
tan δ (MAX.)	0.14	0.12	0.10	0.08												
ESR	Less than or equal to the specified value at 100kHz, 20°C															
Leakage Current	After 2 minutes' application of rated voltage at 20°C, leakage current is not more than 0.01CV(μA).															
Temperature Characteristics (Max.Impedance Ratio)	Z-25°C / Z+20°C ≤ 2 Z-55°C / Z+20°C ≤ 2.5 (100kHz)															
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after D.C. bias plus rated ripple current is applied for 4000 hours at 125°C, the peak voltage shall not exceed the rated voltage.				<table><tr><td>Capacitance change</td><td>Within ± 30% of initial capacitance value</td></tr><tr><td>tan δ</td><td>200% or less of the initial specified value</td></tr><tr><td>ESR</td><td>200% or less of the initial specified value</td></tr><tr><td>Leakage current</td><td>Less than or equal to the initial specified value</td></tr></table>		Capacitance change	Within ± 30% of initial capacitance value	tan δ	200% or less of the initial specified value	ESR	200% or less of the initial specified value	Leakage current	Less than or equal to the initial specified value		
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tan δ	200% or less of the initial specified value															
ESR	200% or less of the initial specified value															
Leakage current	Less than or equal to the initial specified value															
Shelf Life	After storing the capacitors under no load at 125°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above.															
Damp Heat (Steady State)	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 85°C, 85% RH.				<table><tr><td>Capacitance change</td><td>Within±30% of the initial capacitance value</td></tr><tr><td>tan δ</td><td>200% or less of the initial specified value</td></tr><tr><td>Leakage current</td><td>Less than or equal to the initial specified value</td></tr></table>		Capacitance change	Within±30% of the initial capacitance value	tan δ	200% or less of the initial specified value	Leakage current	Less than or equal to the initial specified value				
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Leakage current	Less than or equal to the initial specified value															
Resistance to Soldering Heat	After soldering the Capacitor, After restored at room temperature, they meet the characteristics requirements listed below.				<table><tr><td>Capacitance change</td><td>Within±10% of the initial capacitance value</td></tr><tr><td>tan δ</td><td>Less than or equal to the initial specified value</td></tr><tr><td>Leakage current</td><td>Less than or equal to the initial specified value</td></tr></table>		Capacitance change	Within±10% of the initial capacitance value	tan δ	Less than or equal to the initial specified value	Leakage current	Less than or equal to the initial specified value				
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tan δ	Less than or equal to the initial specified value															
Leakage current	Less than or equal to the initial specified value															
Marking	Black print on the case top.															

Dimensions



Type numbering system (Example : 35V 47μF)



	φ6.3 × 5.8	φ6.3 × 7.7	φ8 × 10	φ10 × 10
A	7.3	7.3	9.0	11.0
B	6.6	6.6	8.3	10.3
C	6.6	6.6	8.3	10.3
E	2.2	2.2	3.1	4.5
L	5.8	7.7	10.3	10.3
H	0.5 to 0.8	0.5 to 0.8	0.8 to 1.1	0.8 to 1.1

Voltage

V	25	35	50	63
Code	E	V	H	J

Specifications

V	25	35	50	63
Cap. (μF)	1E	1V	1H	1J
10	100			6.3 × 5.8 120 700
22	220		6.3 × 5.8 80 750	6.3 × 7.7 80 900
33	330		6.3 × 7.7 40 1100	8 × 10 40 1100
47	470	6.3 × 5.8 60 900		
56	560			10 × 10 30 1400
68	680	6.3 × 7.7 35 1400	8 × 10 30 1250	
100	101	6.3 × 7.7 30 1400	10 × 10 28 1600	
150	151			
220	221	8 × 10 27 1600		
270	271			
330	331	10 × 10 20 2000		

ESR at 20°C 100kHz
Rated ripple Current at 125°C 100kHz

Frequency coefficient of rated ripple current

Frequency	120Hz	1kHz	10kHz	100kHz or more
Coefficient	0.15	0.40	0.75	1.00

- Taping specifications are given in page 23.
- Recommended land size, soldering by reflow are given in page 18, 19.
- Please refer to page 3 for the minimum order quantity.