

GYA

Chip Type, 125°C High Reliability



Expanded

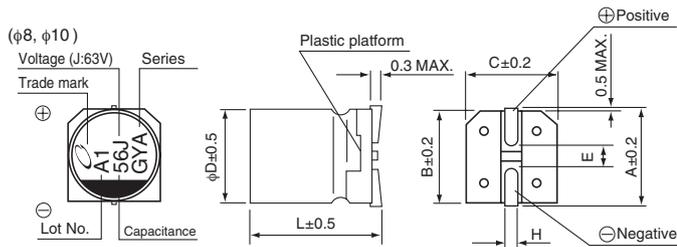
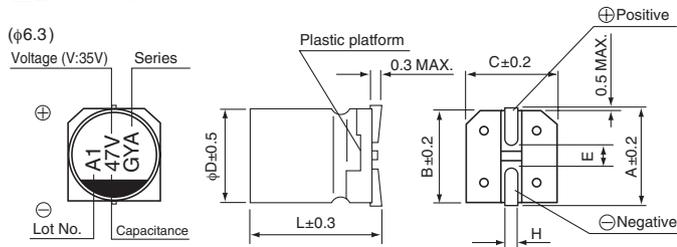
- High Reliability, Low ESR, High ripple current.
- Long life of 4000 hours at 125°C.
- Adapted to the RoHS directive (2011/65/EU, (EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.



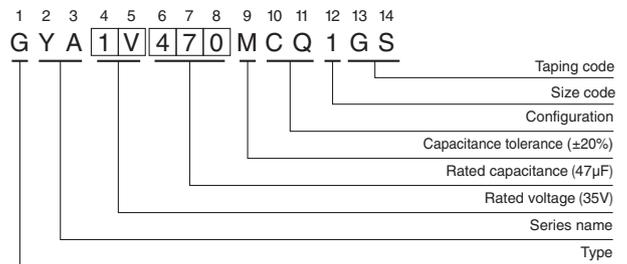
■ Specifications

Item	Performance Characteristics	
Category Temperature Range	-55 to +125°C	
Rated Voltage Range	16 to 63V	
Rated Capacitance Range	10 to 470μF	
Capacitance Tolerance	±20% at 120Hz, 20°C	
Tangent of loss angle (tan δ)	Rated voltage (V)	16 25 35 50 63
	tan δ (MAX.)	0.16 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 (2000 hours for φ6.3 rated at 16V) at 125°C, the peak voltage shall not exceed the rated voltage.	Capacitance change
		tan δ
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.	ESR
		Leakage current
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.	Capacitance change
		tan δ
Resistance to Soldering Heat	The capacitors are kept on a hot plate for 30 seconds, which is maintained at 250°C. The capacitors shall meet the characteristic requirements listed at right when they are removed from the plate and restored to 20°C.	Leakage current
		Capacitance change
Marking	Black print on the case top.	tan δ
		Leakage current

■ Dimensions



Type numbering system (Example : 35V 47μF)



φD×L	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	16	25	35	50	63
Code	C	E	V	H	J

※ φ6.3×7.7L, φ8×10L, φ10×10L :
The vibration structure-resistant product is also available upon request, please ask for details.

● Dimension table in next page.



■ Dimensions

Cap.(μ F)	V (Code) Code	16			25			35			50			63		
		1C			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				6.3 × 5.8	50	900							10 × 10	30	1400
68	680							6.3 × 7.7	35	1400	8 × 10	30	1250			
82	820	6.3 × 5.8	50	1000												
100	101				6.3 × 7.7	30	1400				10 × 10	28	1600			
150	151	6.3 × 7.7	30	1500				8 × 10	27	1600						
220	221				8 × 10	27	1600									
270	271	8 × 10	25	1700				10 × 10	20	2000						
330	331				10 × 10	20	2000									
470	471	10 × 10	20	2100										ϕ D×L	ESR m Ω	Ripple mArms

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.