GYA

Chip Type, 125°C High Reliability

For SMD | High Ripple Current | Low Impedance | Long Life | Anti-Solvent Feature

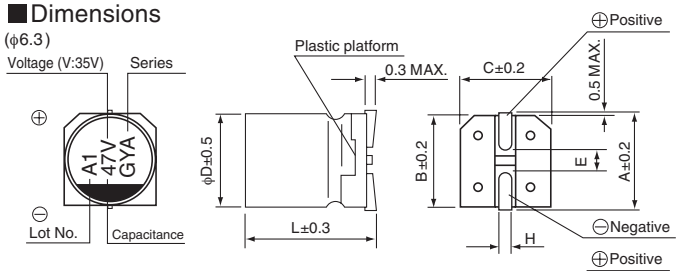
- High Reliability, Low ESR,High ripple current.
- Long life of 4000 hours at 125°C.
- Adapted to the RoHS directive (2011/65/EU).
- AEC-Q200 compliant. Please contact us for details.

Specifications

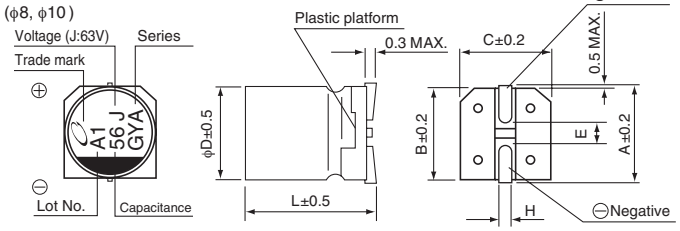
Item	Performance Characteristics
Category Temperature Range	−55 to +125°C
Rated Voltage Range	25 to 63V
Rated Capacitance Range	10 to 330μF
Capacitance Tolerance	±20% at 120Hz, 20°C
Tangent of loss angle (tan δ)	Rated voltage (V): 25 / 35 / 50 / 63; tan δ (MAX.): 0.14 / 0.12 / 0.10 / 0.08 — 120Hz 20°C
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. — 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
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. — 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
Resistance to Soldering Heat	After solderling the Capacitor, After restored at room temperature, they meet the characteristics requirements listed below. — 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
Marking	Black print on the case top.

Dimensions

(φ6.3)



(φ8, φ10)



Type numbering system (Example : 35V 47μF)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
G	Y	A	1	V	4	7	0	M	C	Q	1	G	S

- Taping code
- Size code
- Configuration
- Capacitance tolerance (±20%)
- Rated capacitance (47μF)
- Rated voltage (35V)
- Series name
- Type

(mm)

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	25	35	50	63
Code	E	V	H	J

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

Dimensions

Cap. (μF) \ V	Code	25 (1E)			35 (1V)			50 (1H)			63 (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			
100	101	6.3×7.7	30	1400				10×10	28	1600			
150	151				8×10	27	1600						
220	221	8×10	27	1600									
270	271				10×10	20	2000				φD×L	ESR mΩ	Ripple mArms
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.