GYB

Chip Type, 105°C High Reliability

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

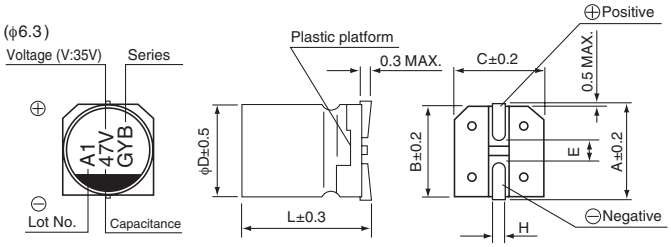
NEW

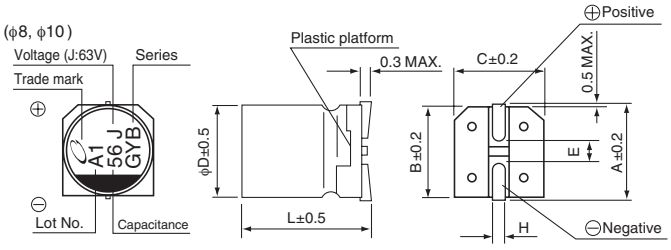
- High Reliability, Low ESR,High ripple current.
- Long life of 10000 hours at 105°C.
- Compliant to the RoHS directive (2011/65/EU).
- AEC-Q200 compliant. Please contact us for details.

■Specifications

Item	Performance Characteristics
Category Temperature Range	−55 to +105°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 10000 hours at 105°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 105°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





Type numbering system (Example : 35V 47μF)

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

- 1 2 3: Type
- 4 5: Series name
- 6 7 8: Rated voltage (35V)
- 9 10 11: Rated capacitance (47μF)
- 12: Capacitance tolerance (±20%)
- 13: Configuration
- 14: Size code
- Taping code

(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.

●Dimension table in next page.

GYB

■Dimensions

Cap.(μF) \ V (Code) / Code		25			35			50			63		
		1E			1V			1H			1J		
10	100										6.3 × 5.8	120	1000
22	220							6.3 × 5.8	80	1100	6.3 × 7.7	80	1500
33	330							6.3 × 7.7	40	1600	8 × 10	40	1600
47	470				6.3 × 5.8	60	1300						
56	560	6.3 × 5.8	50	1300							10 × 10	30	1800
68	680				6.3 × 7.7	35	2000	8 × 10	30	1800			
100	101	6.3 × 7.7	30	2000				10 × 10	28	2000			
150	151				8 × 10	27	2300						
220	221	8 ×10	27	2300									
270	271				10 × 10	20	2500				φD×L	ESR mΩ	Ripple mArms
330	331	10 ×10	20	2500									

ESR at 20°C 100kHz
Rated ripple Current at 105°C 100kHz

● Frequency coefficient of rated ripple current

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