

VGY NEW

Low ESR, High Ripple Current, High Reliability

105° C 10000 Hours

SMD Type: High Temperature Reflow-Soldering

AEC-Q200, Compliant to the RoHS Directive (2011/65/EU)

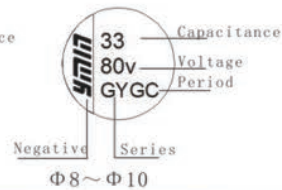
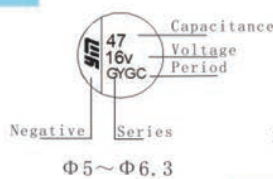
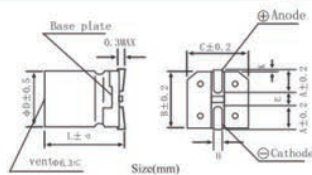


Specification:

Items	Characteristics	
Operation Temperature Range	- 55~+105°C	
Rated Voltage	16~80V	
Capacitance Range	6.8~470 μF 120Hz 20°C	
Capacitance Tolerance	±20% (120Hz 20°C)	
Dissipation Factor	Less than standard data 120Hz 20°C	
Leakage Current ※	I ≤ 0.01CV, charging 2 mins with rated voltage, 20°C	
ESR	Less than standard data 100KHz 20°C	
Temperature Characteristics	Z(-25°C) / Z(+20°C) ≤ 2.0 Z(-55°C) / Z(+20°C) ≤ 2.5 (100KHz)	
Endurance	Apply rated voltage at 105°C for 5000 hours, then test at 20°C after 16 hours, following specification should be:	
	Capacitance change	within ±30% of the initial value
	ESR	Not more than 200% of the specified value
	Dissipation Factor	Not more than 200% of the specified value
	Leakage current	Not more than the specified value
Shelf Life At High Temperature	After leaving capacitors under no load at 105°C for 1000 hours, then test at 25±2°C after 16 hours, the following specification should be met:	
	Capacitance change	within ±30% of the initial value
	ESR	Not more than 200% of the specified value
	Dissipation Factor	Not more than 200% of the specified value
	Leakage current	Not more than the specified value
High Temperature, High Humidity	After applying rated voltage at 85°C and 85% R.H for 1000 hours, then test at 20°C after 16 hours, following specification should be:	
	Capacitance change	within ±30% of the initial value
	Dissipation Factor	Not more than 200% of the specified value
	Leakage current	Not more than the specified value

※If you have question for leakage current, please apply rated voltage on capacitors at 105°C for 2 hours, then test the leakage current again at 20°C.

Standard Size:



ΦD	B	C	A	H	E	K	α
5	5.3	5.3	2.1	0.65 ± 0.10	1.3	0.5MAX	±0.3
6.3	6.6	6.6	2.6	0.90 ± 0.10	1.8	0.5MAX	
8	8.3	8.3	3.4	0.90 ± 0.20	3.1	0.5MAX	±0.5
10	10.3	10.3	3.5	0.90 ± 0.20	4.6	0.7 ± 0.20	

Ripple Current Correction Factor:

Frequency (Hz)	120Hz	1KHz	10KHz	100KHz	300KHz
Correction factor	0.10	0.45	0.50	1.00	1.00

VG Y Standard Size:

Rated Voltage (Surge Voltage) (V)	Capacitance (μ F)	Size Φ D \times L (mm)	Tan δ 120Hz	ESR ($m\Omega$ 100KHz)	Ripple current (mA/r. m. s) 105°C 100KHz)
16 (18.4)	47	5 \times 5.8	0.16	80	900
16 (18.4)	82	6.3 \times 5.8	0.16	45	1600
16 (18.4)	150	6.3 \times 7.7	0.16	27	2200
16 (18.4)	270	8 \times 10	0.16	22	2500
16 (18.4)	470	10 \times 10.5	0.16	18	2600
25 (28.8)	33	5 \times 5.8	0.14	80	900
25 (28.8)	47	6.3 \times 5.8	0.14	50	1300
25 (28.8)	56	6.3 \times 5.8	0.14	50	1300
25 (28.8)	68	6.3 \times 7.7	0.14	30	2000
25 (28.8)	100	6.3 \times 7.7	0.14	30	2000
25 (28.8)	150	8 \times 10	0.14	27	2300
25 (28.8)	220	8 \times 10	0.14	27	2300
25 (28.8)	270	10 \times 10.5	0.14	20	2500
25 (28.8)	330	10 \times 10.5	0.14	20	2500
25 (28.8)	330	10 \times 12.5	0.14	16	3100
35 (41)	22	5 \times 5.8	0.12	100	900
35 (41)	27	6.3 \times 5.8	0.12	60	1300
35 (41)	47	6.3 \times 5.8	0.12	60	1300
35 (41)	47	6.3 \times 7.7	0.12	35	2000
35 (41)	68	6.3 \times 7.7	0.12	35	2000
35 (41)	100	8 \times 10	0.12	27	2300
35 (41)	150	8 \times 10	0.12	27	2300
35 (41)	150	10 \times 10.5	0.12	20	2500
35 (41)	270	10 \times 10.5	0.12	20	2500
35 (41)	270	10 \times 12.5	0.12	17	3000
50 (58)	10	5 \times 5.8	0.10	120	750
50 (58)	10	6.3 \times 5.8	0.10	80	1100
50 (58)	15	6.3 \times 5.8	0.10	80	1100
50 (58)	22	6.3 \times 5.8	0.10	80	1100
50 (58)	33	6.3 \times 7.7	0.10	40	1400
50 (58)	33	8 \times 10	0.10	30	1800
50 (58)	47	8 \times 10	0.10	30	1800
50 (58)	56	8 \times 10	0.10	30	1800
50 (58)	68	8 \times 10	0.10	30	1800
50 (58)	100	10 \times 10.5	0.10	28	2000
50 (58)	120	10 \times 10.5	0.10	25	2000
50 (58)	120	10 \times 12.5	0.10	19	2800
63 (73)	6.8	6.3 \times 5.8	0.08	120	1000
63 (73)	10	6.3 \times 5.8	0.08	120	1000

VG Y Standard Size:

Rated Voltage (Surge Voltage) (V)	Capacitance (μ F)	Size Φ D \times L (mm)	Tan δ 120Hz	ESR (m Ω 100KHz)	Ripple current (mA/r. m. s) 105 $^{\circ}$ C 100KHz)
63 (73)	10	6.3 \times 7.7	0.08	80	1500
63 (73)	15	6.3 \times 7.7	0.08	80	1500
63 (73)	22	6.3 \times 7.7	0.08	80	1500
63 (73)	22	8 \times 10	0.08	40	1600
63 (73)	33	8 \times 10	0.08	40	1700
63 (73)	47	8 \times 10	0.08	40	1600
63 (73)	56	10 \times 10.5	0.08	30	1800
63 (73)	68	10 \times 10.5	0.08	30	1800
63 (73)	82	10 \times 10.5	0.08	30	1800
63 (73)	100	10 \times 12.5	0.08	20	2600
80 (92)	22	8 \times 10	0.08	45	1500
80 (92)	33	10 \times 10.5	0.08	36	1700
80 (92)	39	10 \times 10.5	0.08	35	1700