VHR



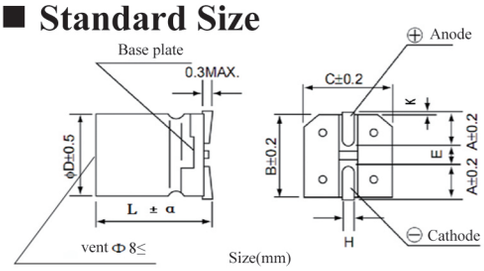
- ◆ 150℃ Ultra High Temperature 2000 Hours
- ◆ Low ESR, High Ripple Current, High Reilability
- ◆ SMD Type: High Temperature Reflow-Soldering
- ◆ RoHS Compliant（2011/65/EU）

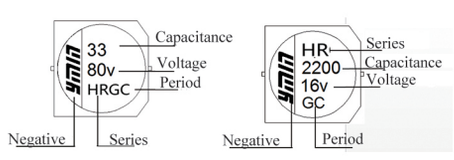
■ Specification

Items	Characteristics
Operation Temperature Range	-55℃~+150℃
Rated Voltage	25~80V
Capacitance Range	33~1800μF 120Hz/20℃
Capacitance Tolerance	±20%(120Hz/20℃)
Dissipation Factor	Less than standard data 120Hz/20℃
Leakage Current	I≤0.01CV,charging 2 mins with rated voltage,20℃
ESR	Less than standard data 100KHz/20℃
Temperature Characteristics	Z（-25℃）/Z（+20℃）≤2.0；Z（-55℃）/Z（+20℃）≤2.5（100KHZ）
Endurance	After applying the rated voltage with rated ripple current at 150℃ for 2000 hours, the following specifications shall be satisfied after 16 hours at 20℃:
	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	After leaving capacitor under no load at 105C for 1000 hours, and place it in normal temperature 16 hours with test temperature at 20℃±2℃, the following specifications shall be satisfied
	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
	Note: Over voltage test has to be done before LC test
Humidity	Store the capacitor at 85℃ under the condition of 85%R.H with no load for 1000hrs, the following specifications shall be satisfied after placing capacitor for 16 hours at 20℃.
	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

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

■ Standard Size





ΦD	B	C	A	H	E	K	α
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	
12.5	13.5	13.5	4.7	0.90±0.20	4.6	0.7±0.30	
16	17.0	17.0	5.5	1.20±0.30	6.7	0.7±0.30	±1.0
18	19.0	19.0	6.7	1.20±0.30	6.7	0.7±0.30	

■ Rated Ripple Current Frequency Correction Factor

Frequency(Hz)	120Hz	1KHz	10KHz	100KHz	300KHz
Correction factor	0.12	0.35	0.80	1.00	1.00

VHR

■ Standard Size

Rated Voltage (Surge Voltage) (V)	Capacitance (μF)	Size ΦD×L(mm)	Tanδ 120Hz	ESR (mΩ100kHz)	Ripple current (mA/r.m.s) 150°C100kHz
25(28.8)	220	8×10.5	0.14	27	700
25(28.8)	470	10×10.5	0.14	25	900
25(28.8)	560	10×12.5	0.14	20	1050
25(28.8)	1500	12.5×21.5	0.14	15	2500
35(41)	120	8×10.5	0.12	27	700
35(41)	220	10×10.5	0.12	25	900
35(41)	330	10×12.5	0.12	20	1050
35(41)	1800	18×26.5	0.12	15	4000
50(58)	82	8×10.5	0.10	30	600
50(58)	120	10×10.5	0.10	28	800
50(58)	180	10×12.5	0.10	25	1000
50(58)	1800	18×31.5	0.10	18	5300
63(73)	47	8×10.5	0.08	40	600
63(73)	82	10×10.5	0.08	30	800
63(73)	120	10×12.5	0.08	25	1000
63(73)	1200	18×31.5	0.08	20	5000
80(92)	33	8×10.5	0.08	40	600
80(92)	47	10×10.5	0.08	30	800
80(92)	68	10×12.5	0.08	25	1000
80(92)	680	18×31.5	0.08	20	4700