



VHU

- ◆ 135°C high temperature resistant product, guaranteed for 4000 hours at 135°C
- ◆ Low ESR, high allowable ripple current, high reliability and long life
- ◆ Can meet the requirements of vibration resistance Surface mount type high temperature lead-free reflow soldering
- ◆ The product complies with AEC-Q200 and has responded to the RoHS directive

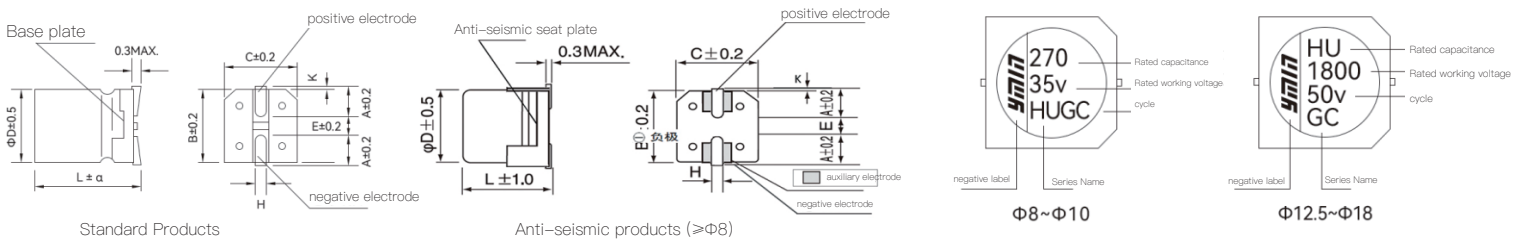


The main technical parameters

project	characteristic	
range of working temperature	-55~+135°C	
Rated working voltage	25 ~ 80V	
capacity range	33 ~ 1800uF 120Hz 20°C	
Capacity tolerance	±20% (120Hz 20°C)	
loss tangent	120Hz 20°C below the value in the list of standard products	
Leakage current \times	Below 0.01 CV(uA), charge at rated voltage for 2 minutes at 20°C	
Equivalent Series Resistance (ESR)	100kHz 20°C below the value in the list of standard products	
Temperature Characteristics (Impedance Ratio)	$Z(-25^{\circ}\text{C})/Z(+20^{\circ}\text{C})\leq 2.0$; $Z(-55^{\circ}\text{C})/Z(+20^{\circ}\text{C})\leq 2.5$ (100kHz)	
Durability	At a temperature of 135°C, apply a rated voltage including a rated ripple current for a specified period of time, and then place it at 20°C for 16 hours before testing, the product should meet	
	Capacitance change rate	±30% of initial value
	Equivalent Series Resistance (ESR)	≤200% of the initial specification value
	loss tangent	≤200% of the initial specification value
	leakage current	≤Initial specification value
local temperature storage	Store at 135°C for 1000 hours, place it at room temperature for 16 hours before testing, test temperature: 20°C±2°C, the product should meet the following requirements	
	Capacitance change rate	±30% of initial value
	Equivalent Series Resistance (ESR)	≤200% of the initial specification value
	loss tangent	≤200% of the initial specification value
	leakage current	to initial specification value
High temperature and humidity	Note: Products stored at high temperature must undergo voltage treatment.	
	After applying the rated voltage for 1000 hours at 85°C and 85%R.H humidity, and placing it at 20°C for 16 hours, the product should meet	
	Capacitance change rate	±30% of initial value
	Equivalent Series Resistance (ESR)	≤200% of the initial specification value
	leakage current	≤200% of the initial specification value
	leakage current	≤Initial specification value

※When in doubt about the leakage current value, please place the product at 105°C and apply the rated working voltage for 2 hours, and then conduct the leakage current test after cooling down to 20°C.

Product Dimensions (Unit:mm)



ΦD	B	C	A	H	E	K	a
8	8.3(8.8)	8.3	3	0.90±0.20	3.1	0.5MAX	±0.5
10	10.3(10.8)	10.3	3.5	0.90±0.20	4.6	0.7±0.20	±0.5
12.5	12.8(13.5)	12.8	4.7	0.90±0.30	4.6	0.7±0.30	±1.0
16	17.0(17.5)	17	5.5	1.20±0.30	6.7	0.7±0.30	±1.0
18	19.0(19.5)	19	6.7	1.20±0.30	6.7	0.7±0.30	±1.0

frequency correction factor

Capacitance C	Frequency (Hz)	120Hz	500Hz	1kHz	5kHz	10kHz	20kHz	40kHz	100kHz	200kHz	500kHz
C<47uF	correction factor	0.12	0.2	0.35	0.5	0.65	0.7	0.8	1	1	1.05
47uF≤C<120uF		0.15	0.3	0.45	0.6	0.75	0.8	0.85	1	1	1
C≥120uF		0.15	0.3	0.45	0.65	0.8	0.85	0.85	1	1	1



VHU

List Of Standard Products

Rated voltage (surge voltage) (V)	Nominal capacity (μ F)	Product Dimension Φ DxL(mm)	tan δ 120Hz	ESR (m Ω 100kHz)	Rated ripple current (mA r.m.s/135°C100kHz)		Model	
							Standard Products	Earthquake-Resistant products
25(28.8)	68	8x10.5	0.14	22	1600		VHUD1051E680MVCG	VHUD1051E680MVKZ
25(28.8)	100	8x10.5	0.14	22	1600		VHUD1051E101MVCG	VHUD1051E101MVKZ
25(28.8)	220	8x10.5	0.14	22	1600		VHUD1051E221MVCG	VHUD1051E221MVKZ
25(28.8)	330	10x10.5	0.14	20	2000		VHUE1051E331MVCG	VHUE1051E331MVKZ
25(28.8)	470	10x10.5	0.14	20	2000		VHUE1051E471MVCG	VHUE1051E471MVKZ
25(28.8)	560	10x13	0.14	16	2500		VHUE1301E561MVCG	VHUE1301E561MVKZ
25(28.8)	1500	12.5x21.5	0.14	12	3500		VHUL2151E152MVCG	VHUL2151E152MVKZ
35(41)	120	8x10.5	0.12	22	1600		VHUD1051V121MVCG	VHUD1051V121MVKZ
35(41)	220	10x10.5	0.12	20	2000		VHUE1051V221MVCG	VHUE1051V221MVKZ
35(41)	330	10x13	0.12	17	2400		VHUE1301V331MVCG	VHUE1301V331MVKZ
35(41)	1000	16x16.5	0.12	15	3150		VHUI1651V102MVCG	VHUI1651V102MVKZ
35(41)	1200	18x16.5	0.12	15	3350		VHUJ1651V122MVCG	VHUJ1651V122MVKZ
35(41)	1800	18x26.5	0.12	12	4000		VHUJ2651V182MVCG	VHUJ2651V182MVKZ
50(58)	82	8x10.5	0.1	30	1250		VHUD1051H820MVCG	VHUD1051H820MVKZ
50(58)	120	10x10.5	0.1	25	1600		VHUE1051H121MVCG	VHUE1051H121MVKZ
50(58)	180	10x13	0.1	19	2250		VHUE1301H181MVCG	VHUE1301H181MVKZ
50(58)	1800	18x31.5	0.1	16	5300		VHUJ3151H182MVCG	VHUJ3151H182MVKZ
63(72)	47	8x10.5	0.08	40	1100		VHUD1051J470MVCG	VHUD1051J470MVKZ
63(72)	82	10x10.5	0.08	30	1400		VHUE1051J820MVCG	VHUE1051J820MVKZ
63(72)	120	10x13	0.08	22	2100		VHUE1301J121MVCG	VHUE1301J121MVKZ
63(72)	1200	18x31.5	0.08	16	5000		VHUJ3151J122MVCG	VHUJ3151J122MVKZ
80(92)	33	8x10.5	0.08	40	1100		VHUD1051K330MVCG	VHUD1051K330MVKZ
80(92)	47	10x10.5	0.08	30	1400		VHUE1051K470MVCG	VHUE1051K470MVKZ
80(92)	68	10x13	0.08	22	2100		VHUE1301K680MVCG	VHUE1301K680MVKZ
80(92)	680	18x31.5	0.08	16	4700		VHUJ3151K681MVCG	VHUJ3151K681MVKZ