

- Endurance: 105°C, 5000hrs
- Recommended Applications: Long Life Series
- Corresponding product to RoHS

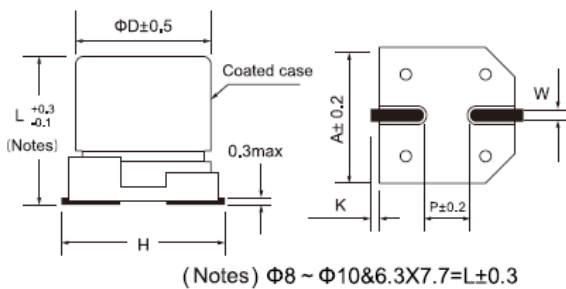


Specifications

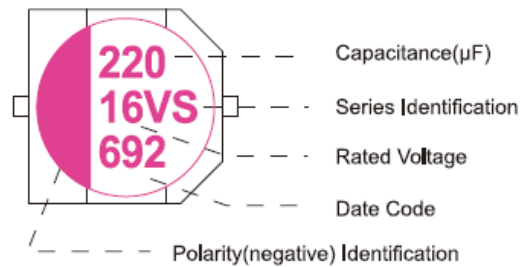
Item	Characteristics	
Category Temperature Range	-55 ~ +105°C	
Rated Voltage Range	4~25VDC	
Rated Capacitance Range	27~ 470 μF	
Capacitance Tolerance	± 20 % (120Hz , 20°C)	
Surge Voltage	Rated voltage (V) x 1.15	
Leakage Current (20°C)	Less than or equal to the value of Table , (After rated voltage applied for 2 minutes) I : Leakage Current (μ A) C : Capacitance(μ F) V : Rated Voltage Range(VDC)	
Dissipation Factor (MAX) (tan δ) (120Hz , 20°C)	WV	4~25
	tan δ	0.12
Temperature characteristic Impedance ratio (MAX)	Z(100KHz) / WV	4 ~ 25V
	Z-25°C / Z+20°C	≤ 1.15
	Z-55°C / Z+20°C	≤ 1.25
Endurance	After applying rated voltage for 5000 hours at 105°C , the capacitor shall meet the following requirement °	
	Appearance	No significant damage
	Capacitance Change	Within ±20% of the initial value
	Dissipation Factor	Not more than 150% of the initial specified value
	Equivalent Series Resistance	Not more than 150% of the initial specified value
Humidity Test	after subjecting 90 to 95% RH for 1000 hours at 60°C , the capacitors shall meet the requirement as Endurance °	
	Capacitance Change	Within ±10% of the initial value
	Dissipation Factor	Not more than 130% of the initial specified value
	Equivalent Series Resistance	Not more than 130% of the initial specified value
	Leakage Current	Not more than the initial specified value
Resistance to Soldering Heat *	Capacitance Change	Within ±10% of the initial value
	Dissipation Factor	Not more than 130% of the initial specified value
	Equivalent Series Resistance	Not more than 130% of the initial specified value
	Leakage Current	Not more than the initial specified value

* For any doubt about measured values, measure the leakage current again after the following voltage treatment °
Voltage treatment: Applying DC rated voltage to the capacitors for 2 hours at 105°C °

Diagram of Dimensions



Marking : case with red printing



SIZE	Φ D x L	A	H(Max)	W	P	K
EA1	6.3x5.8	6.6	7.8	0.65±0.15	1.8±0.2	0.35+0.15/-0.2
EA4	6.3x7.7	6.6	7.8	0.65±0.15	1.8±0.2	0.35+0.15/-0.2
GA6	8x10.4	8.3	10	0.9±0.2	3.1±0.2	0.7±0.2
HA5	10x10.2	10.3	12	0.9±0.2	4.6±0.2	0.7±0.2
HA8	10x12.2	10.3	12	0.9±0.2	4.6±0.2	0.7±0.2

Multiplier for Ripple Current

Frequency(HZ)	120 ≤ F < 1K	1K ≤ F < 10K	10K ≤ F < 100K	100K ≤ F ≤ 500K
Coefficient	0.05	0.30	0.70	1.00

■Dimensions, Rated Ripple Current, Equivalent Series Resistance

Rated (Surge) Voltage(V)	Capacitance (μ F)	SIZE Φ DxL(mm)	RIPPLE (mA/rms, 105 °C 100kHz)	ESR (m Ω , 20°C 100kHz)	LC (μ A max/2min)	Rated (Surge) Voltage(V)	Capacitance (μ F)	SIZE Φ DxL(mm)	RIPPLE (mA/rms, 105 °C 100kHz)	ESR (m Ω , 20°C 100kHz)	LC (μ A max/2min)
4 (4.6)	150	6.3x5.8	2570	22	300	10(11.5)	120	6.3x5.8	2300	27	300
	330	6.3x5.8	2800	22	300		470	8x10.4	3000	22	940
	470	6.3x7.7	2800	20	376	16(18.4)	39	6.3x5.8	2200	30	300
6.3(7.25)	100	6.3x5.8	2800	22	300		68	6.3x5.8	2200	30	300
	120	6.3x5.8	2800	22	300		330	10x12.2	3800	14	1056
	220	6.3x5.8	2800	22	300	20(23)	27	6.3x5.8	2450	40	300
470	10x10.2	4130	20	592	180		10x10.2	3200	25	720	
10(11.5)	47	6.3x5.8	2300	27	300	25(28.75)	150	8x10.4	1350	30	750
	56	6.3x5.8	2300	27	300		220	10x10.2	1800	38	1100
	68	6.3x5.8	2300	27	300		330	10x12.2	2800	30	1650