

- Endurance: 105°C, 2000hrs
- Recommended Applications: Vehclar Special
- Corresponding product to RoHS

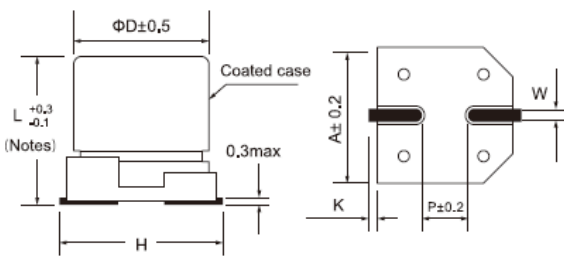
Specifications

Item	Characteristics	
Category Temperature Range	-55 ~ +105°C	
Rated Voltage Range	2.5~25VDC	
Rated Capacitance Range	22~ 1500 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	2.5~25
	tan δ	0.12
Temperature characteristic Impedance ratio (MAX)	Z(100KHz) / WV	2.5 ~ 25V
	Z-25°C / Z+20°C	≤ 1.15
	Z-55°C / Z+20°C	≤ 1.25
Endurance	After applying rated voltage for 2000 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**



(Notes) Φ8 ~ Φ10&6.3x7.7=L±0.3

SIZE	Φ D x L	A	H(Max)	W	P	K
CA1	5x5.8	5.3	6.5	0.65±0.15	1.5±0.2	0.35+0.15/-0.2
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)	
2.5 (2.88)	180	6.3x5.8	2200	25	300	
	220	6.3x5.8	2500	25	300	
	390	6.3x7.7	2720	23	300	
	470	6.3x7.7	2720	23	300	
4(4.6)	100	6.3x5.8	2450	26	300	
	150	6.3x5.8	2450	26	300	
	330	6.3x7.7	2650	25	300	
	560	8x10.4	3950	18	448	
	820	8x10.4	3950	18	656	
	1200	10x10.2	4000	12	960	
6.3(7.25)	100	5x5.8	1380	35	300	
		6.3x5.8	2400	27	300	
	120	6.3x5.8	2400	27	300	
		6.3x5.8	2400	27	300	
	330	6.3x5.8	2400	27	415	
		6.3x7.7	2650	25	415	
	470	6.3x7.7	2650	25	592	
		8x10.4	3610	21	592	
	680	8x10.4	3610	21	857	
		10x10.2	3650	12	857	
	820	10x10.2	3650	12	1033	
		10x12.2	5500	10	1033	
1000	8x10.4	3610	21	1260		
	10x12.2	5500	10	1260		
10(11.5)	22	5x5.8	1270	40	300	
	33	5x5.8	1270	40	300	
	47	5x5.8	1270	40	300	
	56	6.3x5.8	2250	31	300	
	100	6.3x5.8	2250	31	300	
	150	6.3x7.7	2560	27	300	
	390	8x10.4	3020	22	780	
	470	10x10.2	3500	14	940	
	560	10x12.2	5300	12	1120	
	1000	10x12.2	5300	13	2000	
	16(18.4)	22	5x5.8	1210	90	300
		47	6.3x5.8	1600	50	300
82		6.3x7.7	2420	30	300	
100		6.3x7.7	2420	30	320	
120		6.3x7.7	2420	30	384	
150		8x10.4	3490	23	480	
180		8x10.4	3490	23	576	
220		8x10.4	3490	23	704	
270		8x10.4	3490	23	864	
330		10x10.2	3100	16	1056	
330		10x12.2	5050	14	1056	
470		10x12.2	5050	14	1504	
560		10x12.2	5050	14	1792	
680		10x12.2	5050	14	2176	
820		10x12.2	5050	14	2624	
20(23)		22	6.3x5.8	1650	50	300
		47	6.3x7.7	2000	45	300
		100	8x10.4	3320	24	480
	150	10x12.2	4220	21	600	
25(28.75)	22	6.3x5.8	900	65	300	
		6.3x7.7	1800	50	300	
	27	6.3x5.8	1270	60	300	
	47	6.3x5.8	1300	65	300	
		6.3x7.7	1800	45	300	
	68	6.3x7.7	1800	45	340	
	100	8x10.4	3320	35	500	
	150	8x10.4	3320	35	750	
	180	10x10.2	3100	30	900	
	220	8x10.4	3320	35	1100	
270	10x10.2	3320	30	1350		
330	10x12.2	3500	28	1650		