

- Endurance:125°C,2000hrs
- Recommended Applications: High temperature resistant products
- Corresponding product to RoHS

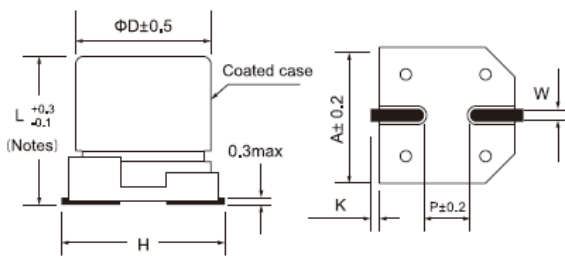
Specifications

Item	Characteristics	
Category Temperature Range	-55 ~ +125°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 125°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 125°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,100kHz)		ESR (m Ω ,20°C 100kHz)	LC (μ A max/2min)
			Tx : 125°C	Tx : 105°C		
2.5 (2.88)	220	6.3x5.8	790	2500	40	300
	390	6.3x7.7	859	2720	30	300
	470	6.3x7.7	859	2720	30	300
	1000	8x10.4	1248	3950	25	500
	1500	10x10.2	1264	4000	20	750
4(4.6)	100	6.3x5.8	445	2450	35	300
	330	6.3x7.7	837	2650	35	300
	560	8x10.4	1250	3950	25	448
	820	8x10.4	1250	3950	25	656
	1200	10x12.2	1738	5500	20	656
6.3(7.25)	47	5x5.8	436	1380	50	300
	68	6.3x5.8	758	2400	40	300
	100	5x5.8	436	1380	50	300
		6.3x5.8	758	2400	35	300
	220	6.3x5.8	758	2400	35	300
		6.3x7.7	840	2650	30	300
	330	6.3x5.8	760	2400	35	415
		6.3x7.7	840	2650	35	415
	470	6.3x7.7	840	2650	30	592
		8x10.4	1140	3610	25	592
	680	8x10.4	11740	3610	25	857
		10x10.2	1153	3650	20	857
	820	10x10.2	1153	3650	20	1033
		10x12.2	1740	5500	25	1033
	1000	8x10.4	1140	3610	26	1260
10x12.2		1740	5500	20	1260	
10(11.5)	22	5x5.8	400	1270	50	300
	33	5x5.8	400	1270	50	300
	47	5x5.8	400	1270	50	300
	56	6.3x5.8	710	2250	40	300
	100	6.3x5.8	710	2250	40	300
		6.3x7.7	808	2560	33	300
	150	6.3x7.7	808	2560	35	300
	390	8x10.4	955	3020	28	780
	470	10x10.2	1106	3500	20	940
		10x12.2	1680	5300	20	940
	560	10x12.2	1680	5300	18	1120
	1000	10x12.2	1680	5300	18	2000

Rated (Surge) Voltage(V)	Capacitance (μ F)	SIZE Φ DxL(mm)	RIPPLE(mA/rms,100kHz)		ESR (m Ω ,20°C 100kHz)	LC (μ A max/2min)
			Tx : 125°C	Tx : 105°C		
16(18.4)	47	6.3x5.8	500	1600	55	300
	82	6.3x7.7	764	2420	30	300
	100	6.3x7.7	764	2420	30	320
	150	8x10.4	1100	3490	25	480
	220	8x10.4	1100	3490	25	704
	270	8x10.4	1100	3490	25	864
	330	10x12.2	1560	5050	18	1056
	390	8x10.4	948	3000	25	1248
	470	10x10.2	980	3100	20	1504
		10x12.2	1600	5050	18	1504
	560	10x12.2	1600	5050	18	1792
680	10x12.2	1600	5050	18	2176	
820	10x12.2	1600	5050	18	2624	
20(23)	22	6.3x5.8	520	1650	55	300
	47	6.3x7.7	630	2000	50	300
	100	8x10.4	1050	3320	30	480
	150	10x12.2	1333	4220	25	600
25(28.75)	22	6.3x5.8	284	900	65	300
		6.3x7.7	568	1800	50	300
	47	6.3x5.8	410	1300	65	300
		6.3x7.7	568	1800	50	300
	68	6.3x7.7	568	1800	50	340
	100	8x10.4	1050	3320	40	500
	180	10x10.2	980	3100	35	900
	220	8x10.4	1050	3320	40	1100
	270	10x10.2	1050	3320	35	1350
	330	10x12.2	1106	3500	33	1650