

EA series

- Standard radial lead type.
- Rated voltage : 2.5~25V.
- Endurance : 2,000hours at 105°C
- Applications : motherboards, servers, VGA, etc.
- RoHS Compliance.
- Halogen Free compliant

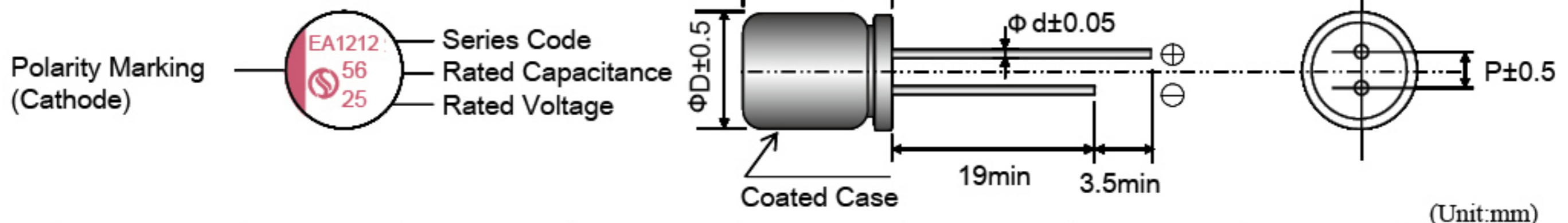


SPECIFICATIONS

Items	Conditions	Characteristics
Category Temperature Range	—	-55 to +105°C
Rated Voltage Range	—	2.5 ~ 25V
Capacitance Tolerance	at 20°C, 120 Hz	±20% (M)
Surge Voltage	at 105°C	Rated voltage ×1.15V
Leakage Current	at 20°C after 2 minutes	$I \leq 0.2CV$ or $300(\mu A)$ Whichever is greater measured, after 2 minutes application of rated working voltage at +20°C. Please see the attached characteristics list
Dissipation Factor (tan δ)	at 20°C, 120 Hz	Please see the attached characteristics list
Characteristics of Impedance at low, high temperature	at -55°C, 100kHz	$Z(-55^\circ C) / Z(+20^\circ C) \leq 1.25$
	at -25°C, 100kHz	$Z(-25^\circ C) / Z(+20^\circ C) \leq 1.15$
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 2,000 hours at 105°C.	Appearance NO significant damage.
		Capacitance change $\leq \pm 20\%$ of the initial value.
		DF (tan δ) $\leq 150\%$ of the initial specified value.
		ESR $\leq 150\%$ of the initial specified value.
Damp Heag (Steady State)	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjecting them to store 60°C, 90 to 95% RH for 1,000 hours, without DC applied.	Appearance NO significant damage.
		Capacitance change $\leq \pm 20\%$ of the initial value.
		DF (tan δ) $\leq 150\%$ of the initial specified value.
		ESR $\leq 150\%$ of the initial specified value.
Surge Voltage	The capacitors shall be subjected to 1,000 cycles each consisting of charge with the surge voltages specified at 105°C for 30 seconds through a protective resistor (R = 1 kΩ) and discharge for 5 minutes 30 seconds.	Appearance NO significant damage.
		Capacitance change $\leq \pm 20\%$ of the initial value.
		DF (tan δ) $\leq 150\%$ of the initial specified value.
		ESR $\leq 150\%$ of the initial specified value.
		Leakage current \leq The initial specified value.

※ Note : If any doubt arises, measure the leakage current after following voltage treatment.
Voltage treatment : DC rated voltage are applied to the capacitors for 120 minutes at 105°C.

MARKING AND DIMENSIONS



Size	5x6	5x8	6.3x6	6.3x8	6.3x11	8x8	8x12	10x12、14
φ D	5	5	6.3	6.3	6.3	8	8	10
L	L+1.0 max	L+1.0 max	L+1.0 max	L+1.5 max	L+1.0 max	L+1.0 max	L+1.0 max	L+1.0 max
φ d	0.45	0.5	0.45	0.5	0.5	0.6	0.6	0.6
P	2	2	2.5	2.5	2.5	3.5	3.5	5.0

EA SERIES STANDARD CHARACTERISTICS LIST

Rated Voltage (S.V.)	Cap (μF)	Size DxL	Leakage current (μA) max. ※2	ESR (mΩ) max. 100k to 300kHz / 20°C	Rated Ripple Current (mA rms) 100kHz / 105°C	D.F. (tanδ) max. 120Hz / 20°C
2.5 (2.9)	390	6.3x6	300	35	2,100	0.12
	560	6.3x8	300	12	3,500	0.12
	560	8x8	300	12	4,320	0.12
	820	6.3x8	410	12	5,200	0.12
	1,200	8x8	600	12	5,200	0.12
	1,500	8x12	750	10	5,200	0.12
	2,700	10x12	1,350	10	5,230	0.12
4 (4.6)	270	6.3x6	300	35	2,000	0.12
	560	6.3x8	448	15	3,500	0.12
	680	6.3x8	544	15	3,500	0.12
	820	8x8	656	13	5,100	0.12
	1,000	8x12	800	12	5,100	0.12
	2,200	10x12	1,760	12	5,560	0.12
6.3 (7.2)	82	5x6	300	40	1,700	0.12
	100	6.3x6	300	35	1,900	0.12
	220	6.3x6	300	35	1,900	0.12
	470	6.3x8	592	15	3,630	0.12
	560	6.3x8	706	15	3,630	0.12
	560	8x8	706	15	4,210	0.12
	680	8x8	857	15	4,710	0.12
	1,000	8x12	1,260	14	5,100	0.12
	1,500	10x10	1,890	15	5,400	0.12
	2,200	10x12	2,772	15	5,400	0.12
10 (11.5)	47	5x8	300	25	2,200	0.12
	220	5x8	440	25	2,200	0.12
	330	6.3x8	660	25	3,560	0.12
	680	8x8	1,360	25	3,700	0.12
	820	8x12	1,640	12	4,500	0.12
	1,500	10x12	3,000	12	5,440	0.12
16 (18.4)	47	6.3x6	300	25	1,620	0.12
	82	6.3x6	300	25	1,890	0.12
	100	6.3x6	320	25	1,890	0.12
	270	6.3x8	864	15	2,680	0.12
	470	8x8	1,504	15	2,820	0.12
	560	8x12	1,792	20	3,640	0.12
	680	10x12	2,176	16	4,270	0.12
	820	10x12	2,624	16	4,270	0.12
	1,000	10x12	3,200	16	4,270	0.12

※ 1. Capacitance tolerance : ±20% (M)
 ※ 2. After 2 minutes

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Rated Voltage (S.V.)	Cap (μF)	Size DxL	Leakage current (μA) max. ※2	ESR (mΩ) max. 100k to 300kHz / 20°C	Rated Ripple Current (mA rms) 100kHz / 105°C	D.F. (tanδ) max. 120Hz / 20°C
20 (23.0)	22	6.3x6	300	60	1,450	0.12
	82	6.3x6	328	60	1,450	0.12
	220	6.3x8	880	40	1,620	0.12
	330	8x8	1,320	40	2,400	0.12
	470	8x12	1,880	24	3,320	0.12
	820	10x12	3,280	20	3,800	0.12
25 (28.8)	6.8	6.3x6	300	80	1,200	0.12
	47	6.3x6	300	40	2,000	0.12
	100	6.3x8	500	30	2,150	0.12
	180	8x8	900	30	2,580	0.12
	220	8x12	1,100	25	3,200	0.12
	330	10x10	1,650	28	3,800	0.12
	470	10x12	2,350	25	4,100	0.12
	560	10x14	2,800	20	4,500	0.12
	680	8x16	3,400	20	4,600	0.12
	820	10x14	4,100	20	5,000	0.12

※ 1. Capacitance tolerance : ±20% (M)
 ※ 2. After 2 minutes

FREQUENCY COEFFICIENT FOR RIPPLE CURRENT

Frequency	120Hz ≤ f < 1kHz	1kHz ≤ f < 10kHz	10kHz ≤ f < 100kHz	100kHz ≤ f < 500kHz
Coefficient	0.05	0.3	0.7	1

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