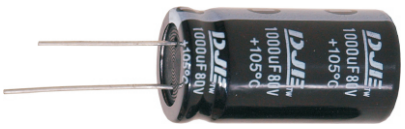
Electrolytic series/
ECR type, ESI type

ECR ESI



- Made of electrolytes and aluminum foils
- Long operation life and reliability
- Low dissipation factor and impedance
- Standard series for general purpose for pc board plug in
- Endurance with ripple current: 2,000hrs/ 3000hrs at 85/ 105℃ for optional.

Application: ECR, Snap-In and RMSS are widely used in electronic ballast, power supply, UPS and inverter. Capacitance tolerance is available to customer requested. 低阻抗型電解電容器，低損失、低阻抗、長壽命、高穩定性，適用於高品質電子電源以及電源濾波、電源供應器、電子鎮流器、電子節能燈等用途。

Specifications

Capacitance range Voltage range	100 ~ 15000μF/ 25V ~ 100V 2.2 ~ 2200μF/ 160V ~ 450V
Capacitance tolerance	+20-20% (M) for standard/ ±10% (K) for customized.
Temperature range	-40 ~ +85℃/ -40 ~ +105℃ optional
Leakage current	I≦0.01CV or 3μA Whichever is greater (at 20℃, after 2 mins.) I= Leakage current(μA), C= Rated capacitance(μF), V= Rated voltage(V)

Dissipation factor (Tanδ%)

When the capaciance exceeds 1000μF, 0.02 shall be added every 1000uF increase at 20℃, 120Hz

ECR	Rated V	25	35	50	63	100	160	200	250	350	400	450
	Tanδ%	0.15	0.12	0.10	0.10	0.10	0.20	0.20	0.20	0.20	0.25	0.25

ESI	Rated V	63	100	160	200	250	350	400	450
	Tanδ%	0.20	0.15	0.15	0.15	0.15	0.15	0.15	0.15

Low temperature characteristics

Impedance ration max. at 20℃, 120Hz

ECR	Rated V	25	35	50	63	100	160	200	250	350	400	450
	-25℃/25℃	2	2	2	2	2	8	8	8	12	12	12
	-40℃/25℃	4	4	3	3	3	8	8	8	12	12	12

ESI	Rated V	63	100	160	200	250	350	400	450
	-25℃/25℃	2	2	4	4	4	4	4	8
	-40℃/25℃	6	5	4	8	10	16	18	20

Load life

The following specification shall be satisfied when the capacitors are restored to 20℃ after the rated voltage with the rated ripple current is applied for 2000 hrs at 105℃

Capacitance change ≦ ±20% of the initial measured value
DF (Tanδ%) ≦ ±200% of the initial specified value
Leakage current ≦ The initial specified value

Shelf life

The following specification shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1000 hrs at 105℃ without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 mins., at least 24 hrs and not more than 48hrs before the measurement

Capacitance change ≦ ±20% of the initial measured value
DF (Tanδ%) ≦ ±200% of the initial specified value
Leakage current ≦ The initial specified value

Ripple current & Frequency multipliers

Freq. / Cap.	60(50)Hz	120Hz	500Hz	1KHz	10KHz up
Under 100μF	0.45	0.55	0.75	0.9	1.0
100 to 1000μF	0.65	0.75	0.9	0.98	1.1
1000μF up	0.75	0.8	0.95	1.00	1.1

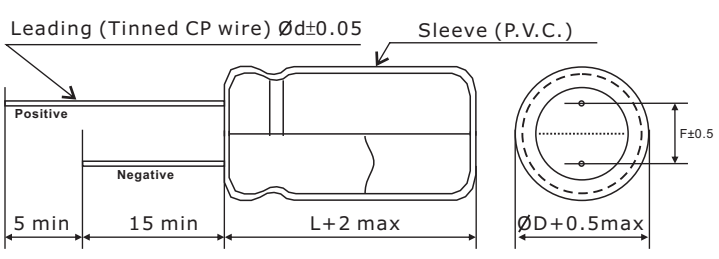
Ripple current & Temperature multipliers

Temperature (℃)	85	105
Multiplier	1.7	1.00

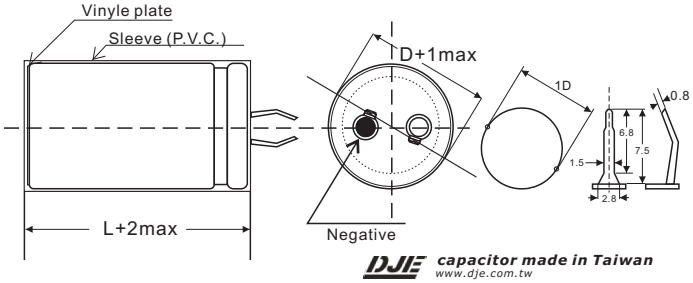
Drawing

ECR

D	10	13	16	18	22	25
F	5	5	7.5	7.5	10	12.5
d	0.6	0.6	0.8	0.8	0.8	1.0



ESI



DJE capacitor made in Taiwan
www.dje.com.tw