

DC-Link Film Capacitor

Type : **TYPE1**



Features

- High safety, Self-healing and Self-protecting function built in.
- No catastrophic failure upon natural end of life due to inbuilt fuse function.
- Open circuit failure mode by fuse function patterned electrode
- Can replace Electrolytic Capacitor
- Low ESR, High Ripple Current capability
- Low ESL
- RoHS directive compliant

Recommended applications

- Any automotive and/or other application requiring DC Linkage
- * Verify the usage and fitting environments, and make sure to observe the rated performance specified in the corresponding specifications.

Construction

- Dielectric : Polypropylene
- Electrode : Metallized dielectric with Segment pattern
- Plastic Case : PPS. equivalent to UL94 V-0
- Sealing : Epoxy Resin equivalent to UL94 HB
- Terminal : Copper with Tin plating

Explanation of part number

1	2	3	4	5	6	7	8	9	10	11	12
E	Z	T	V	K	C	T	Y	P	1	H	A

Specifications

Operating temperature on the surface of the case	- 40 °C to +105 °C including self heat generation
Capacitance	581 μF ^{+10%} / _{-5%} at 1 kHz, 25 °C
Rated voltage	450 V.DC
Maximum voltage	600 V.DC for 60 sec in life time
Rated ripple current	Continuous 80 Arms at 10 kHz
Current derating	Refer Fig.1
ESR	0.8 mΩ or less at 10KHz
ESL	20 nH or less at 1MHz
Insulation Resistance between Terminals and Case	1 GΩ or more Measure after applying 500 ^{+50%} V.DC for 2 ^{+2%} seconds.
Dimensions L × W × H (Typical data)	164 × 115 × 43.1 mm : Excluding terminals
Weight (Typical data)	980 g

Note:

1) Voltage includes ripple voltage

2) Derate the current when the maximum surface temperature exceeds 95 degC, as shown in Fig. 1.

Current Derating

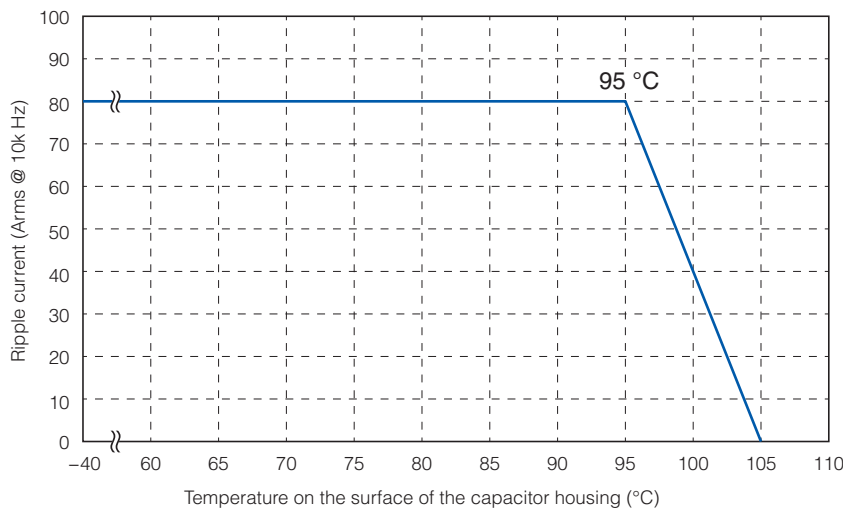
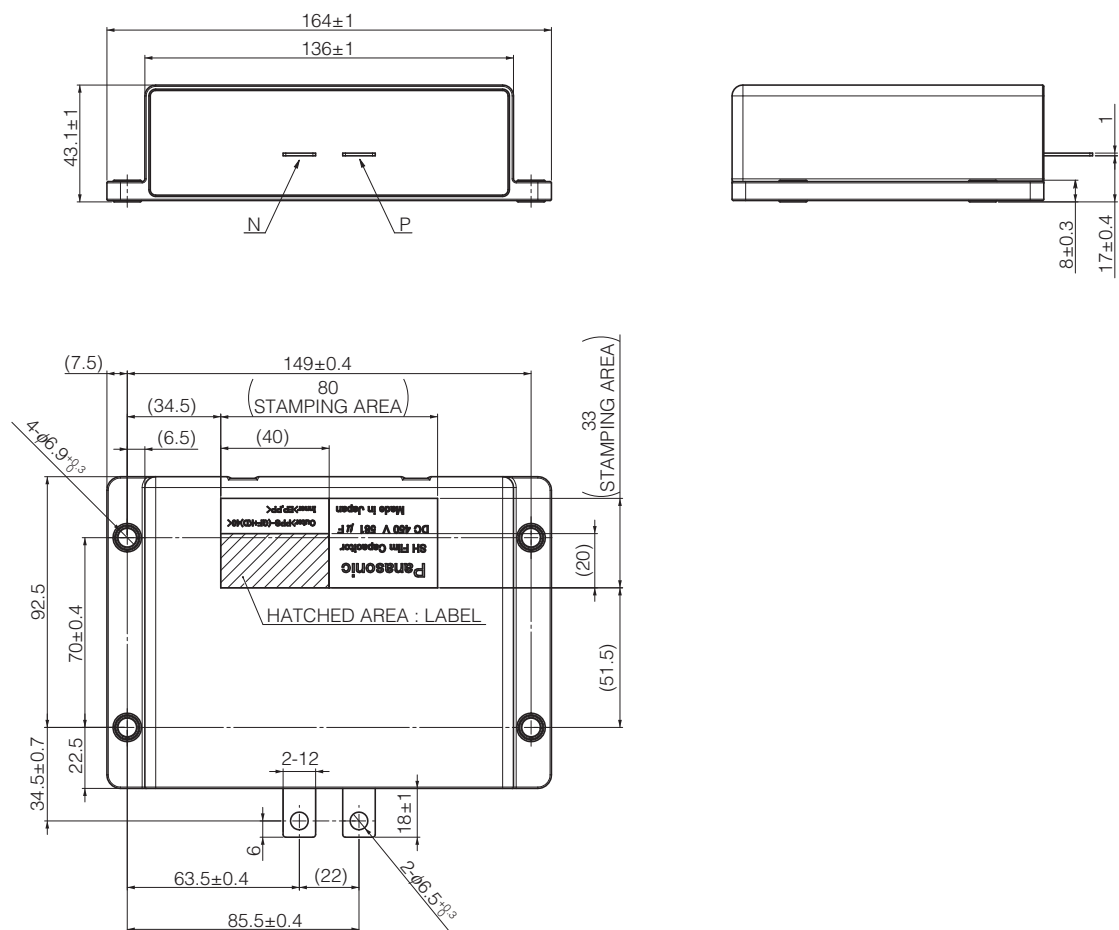


Fig.1 Current derating curve

Dimensions

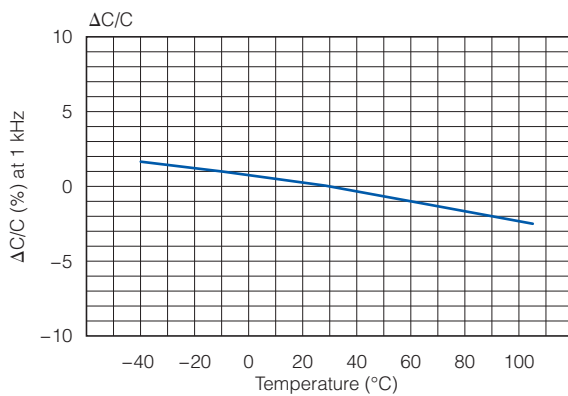
Unit : mm



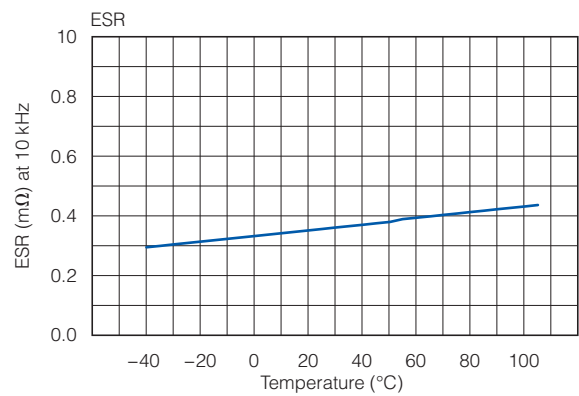
Characteristics <Reference>

<Temperature characteristics (Typical curve)>

● Change of capacitance

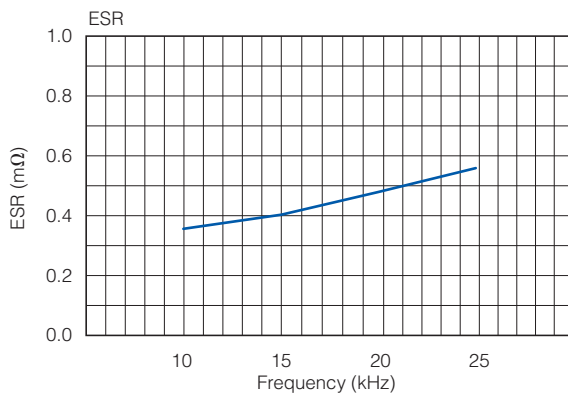


● Equivalent series resistance



<Frequency characteristics (Typical curve)>

● Equivalent series resistance



<Lifetime Expectancy (Reference)>

* Expected life : 15,000 hours

* Failure in Time : 300 Fits

The above values are reference calculated under an pre-assumed average operating condition.