

Metallized Polypropylene Film Capacitor - Power electronic capacitor

DC-Link Film Capacitor Standard 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



■ Application

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

■ Product Part Number

- EZTVKCTYP1HA

■ Specification

Item	Specification
Operating Temperature on the Surface of the Case	-40 °C to +105 °C including self heat generation
Capacitance	581uF +10%/-5% @1kHz, 25 °C
Rated Voltage	450 VDC
Maximum Voltage	600 VDC for 60 sec in life time
Rated Ripple Current	Continuous 80 Arms at 10kHz
Current Derating	Refer Fig.1
ESR	0.8mΩ or less at 10KHz
ESL	20 nH or less at 1MHz
Insulation Resistance between Terminals and Case	1 GΩ or more Measure after applying DC500+50/-0V for 2+2/-0 seconds.
Dimensions L x W x H (Typical data)	164 x 115 x 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 95degC, as shown in Fig.1.

■ **Current Derating**

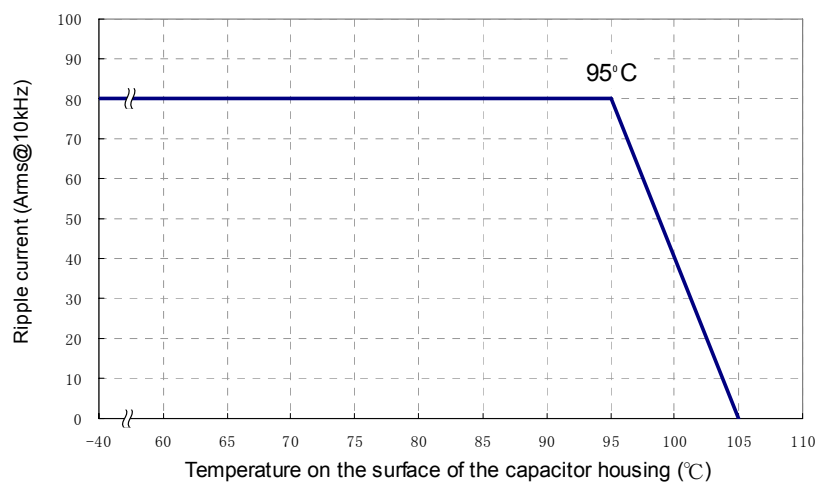
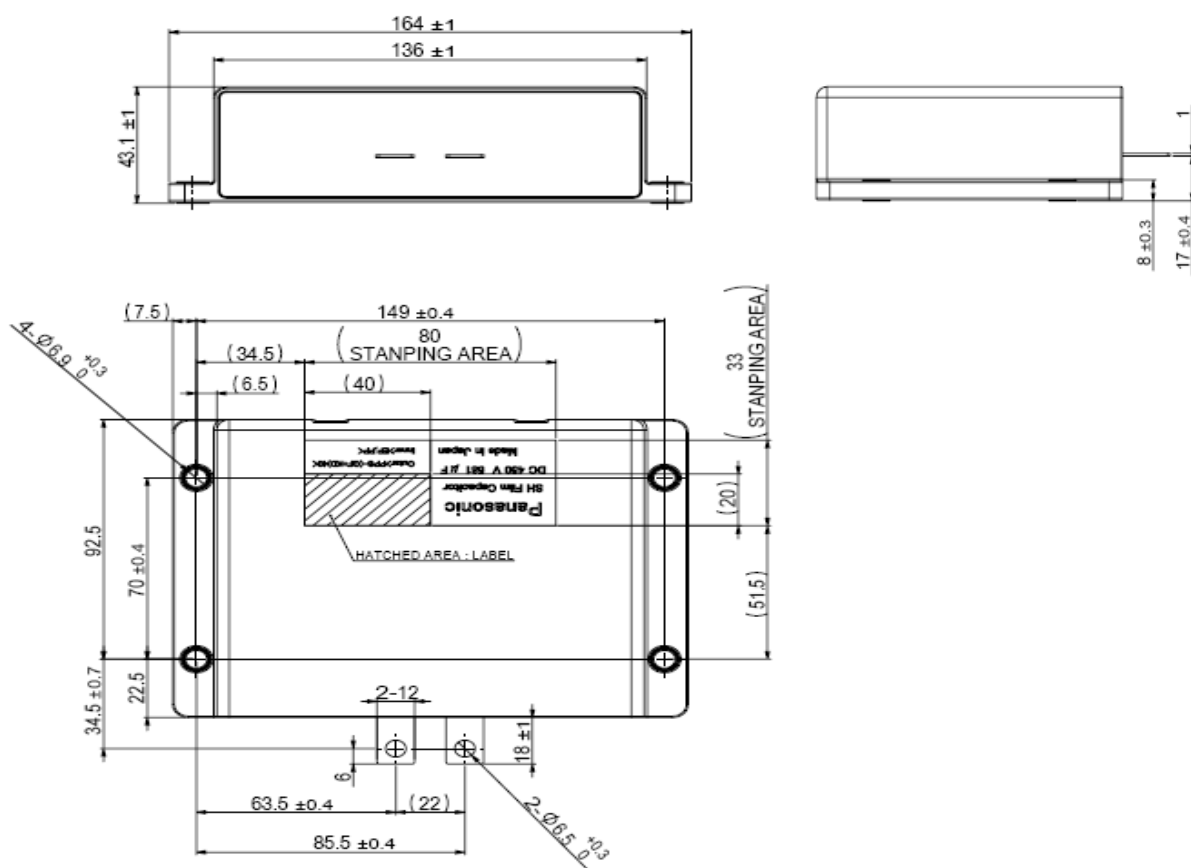


Fig.1 Current derating curve

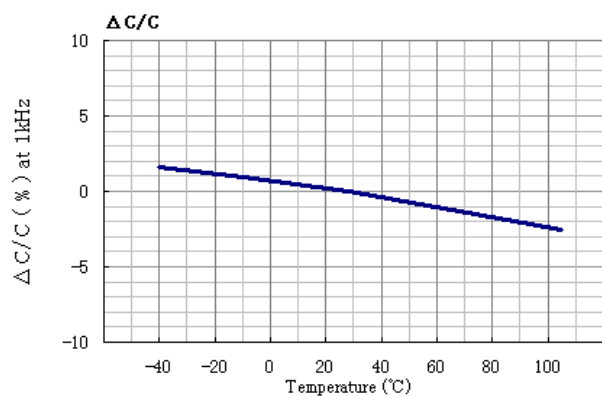
■ **Dimensions (in mm)**



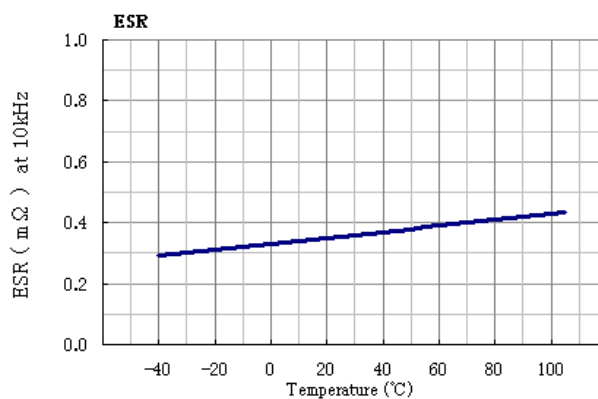
■ Characteristics <Reference>

<Temperature Characteristics (Typical Curve)>

Change of Capacitance

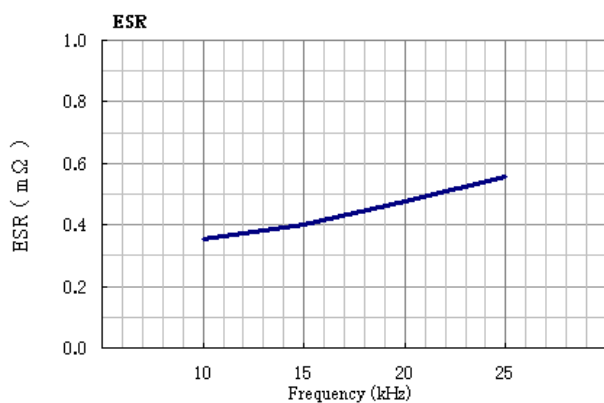


Equivalent Series Resistance



<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 conditior