# **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

### Application

•Any automotive and/or other application requiring DC Linkage

XVerify the usage and fitting environments, and make sure to observe the rated performance specified in the corresponding specifications.

### Construction

- Dielectric
- Electrode
- : Metallized dielectric with Segment pattern : PPS. equivalent to UL94 V-0

: Polypropylene

- •Plastic Case
- SealingTerminal
- : Epoxy Resin equivalent to UL94 HB : 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	581 μF +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

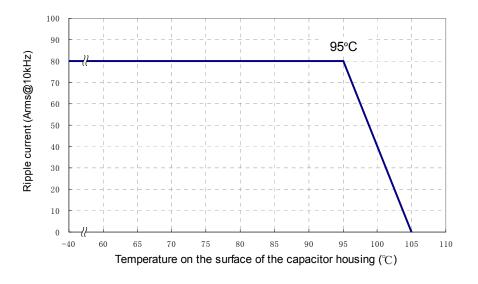
Note:

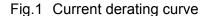
1) Voltage includes ripple voltage

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

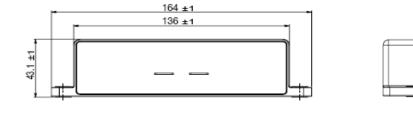


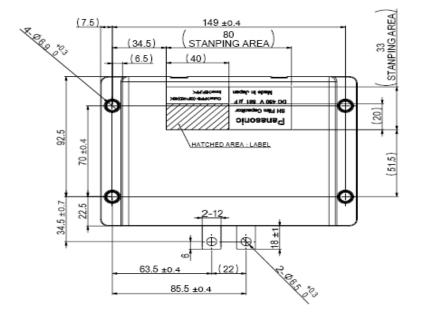
# Current Derating







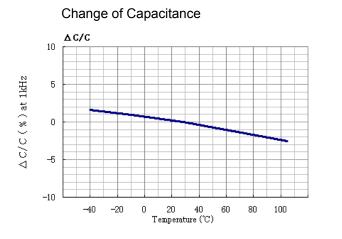






## Characteristics <Reference>

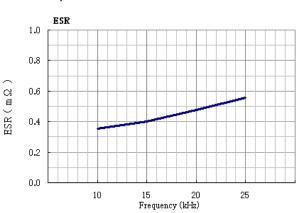
<Temperature Characteristics (Typical Curve)>



ESR 1.0 ESR (m \Omega ) at 10kHz 0.8 0.6 0.4 0.2 0.0 -40 -20 60 80 100 0 20 40 Temperature (°C)

**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.