



Film Capacitors

Series/Type:

Metallized PP DC Link Capacitors - Customized product

Overview

The 398 series capacitor is a polypropylene metallized film capacitor customized as per customer requirements.

Applications

Typical applications include DC filtering, DC link, power electronics, energy storage, motor drives in EV or HEV.

Benefits

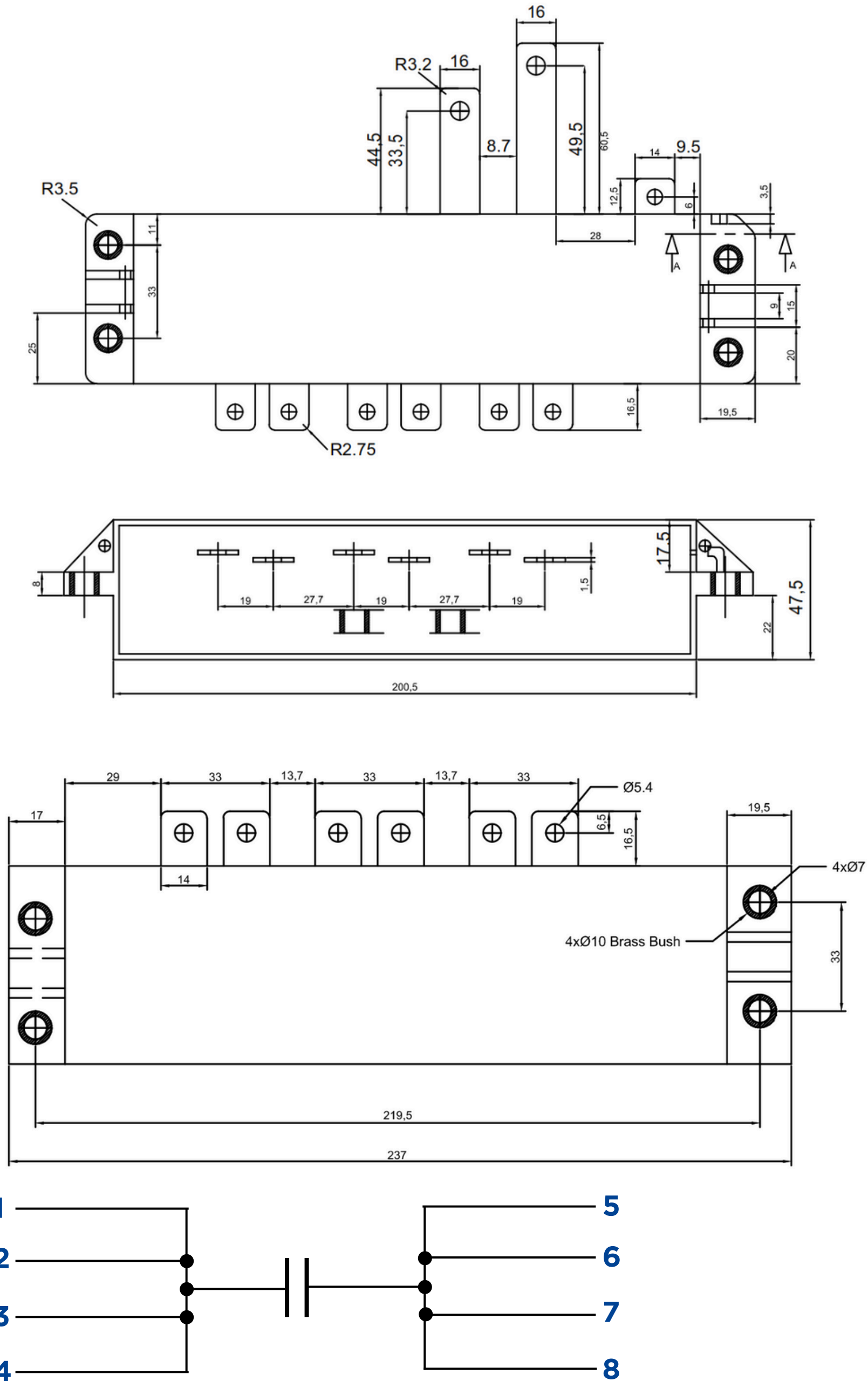
- Used in DC Link circuits, can replace electrolytic capacitor
- Good self-healing property
- Low Losses and high current capability
- Low ESR and ESL
- Low leakage current
- Long useful life

Part Number System

398	507	K	3A	1	A
Series Code	Rated Capacitance Value	Rated Cap. Tolerance	Rated Voltage	Packing Type	Design Reference
DC Link Customized product	Three-digit (257) indicate rated capacitance in Pico Farad (First two digits indicate value & third digit indicates number of zeroes to be suffixed to first two digits)	J = ±5% K = ±10%	2I - 450 2H - 500 2V - 600 2K - 700 2L - 800 2N - 900 3A - 1000 2O - 1100 2P - 1200 3U - 300 2X - 1400 3R - 1500 3C - 1600 3D - 2000		

398 - Metallized Polypropylene DC Link Film Capacitors Customized

Dimensions - Millimeters



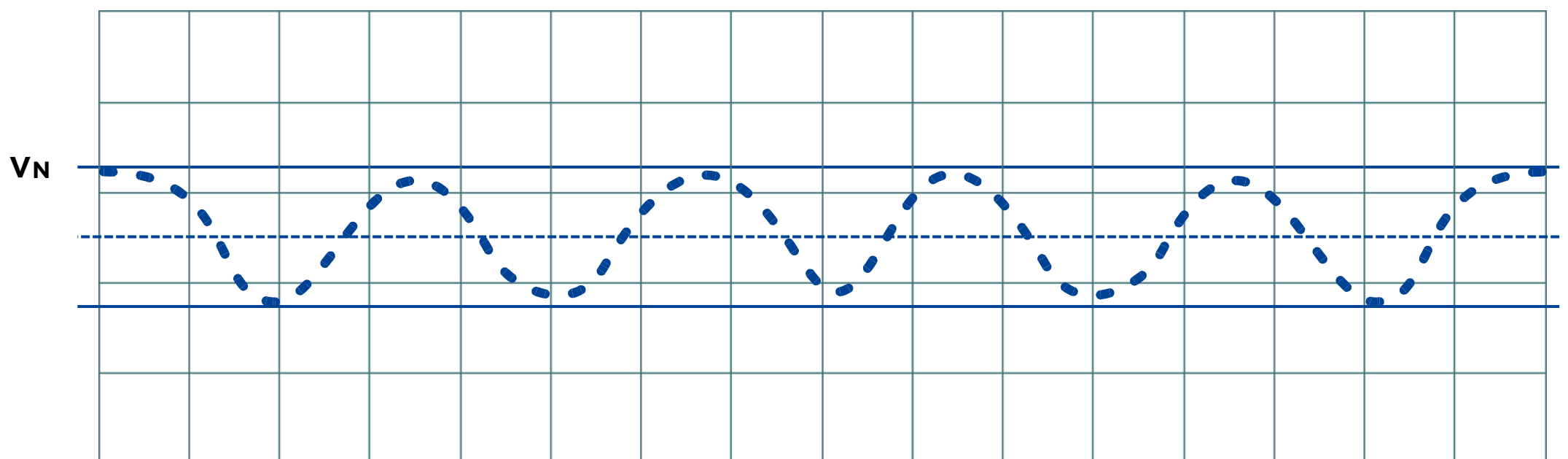
General Technical Data

Dielectric	Polypropylene metallized film, non-inductive type, self-healing property
Application	DC link for EV or HEV
Climatic Category	55/85/56 IEC 60068-1
Temperature Range	-55°C to +85°C
Standard	IEC 61071, IEC 63337
Protection	Solvent resistant plastic case UL 94 V-0 compliant Thermosetting resin sealing UL 94 V-0 compliant
Leads	Flat terminals

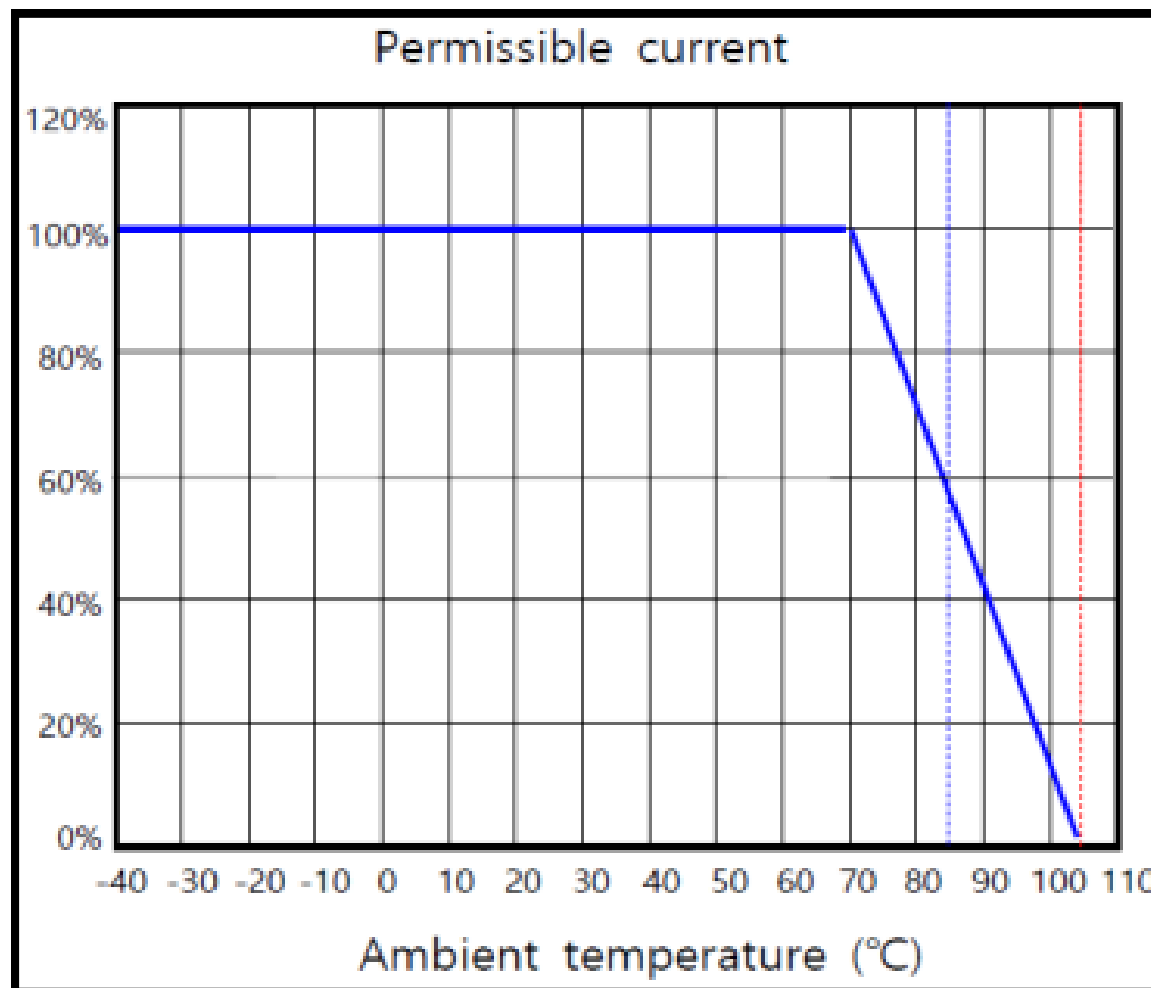
Electrical Parameters

Rated Capacitance	Customized part
Rated Voltage (VN DC)	Upto 2000VDC (Upon request)
Capacitance Tolerance	±10% (K) measured at T = +25°C ±5°C
Insulation resistance Rins given as time constant $\tau = C_R \cdot R_{ins}$	$\tau > 10,000 \text{ s (60 s), 100 V}$
Voltage proof test between terminals	1.5x VN DC, 10s
Voltage proof test between terminal and case	2110 VAC, 50Hz, 10s
Pulse handling capacity (V/μs)	$I_p \text{ (A)} / C \text{ (}\mu\text{F)}$
ESR(mΩ), 10KHz	0.51
ESL	≤15nH@1MHz
Max. Ripple Current	140 Amp

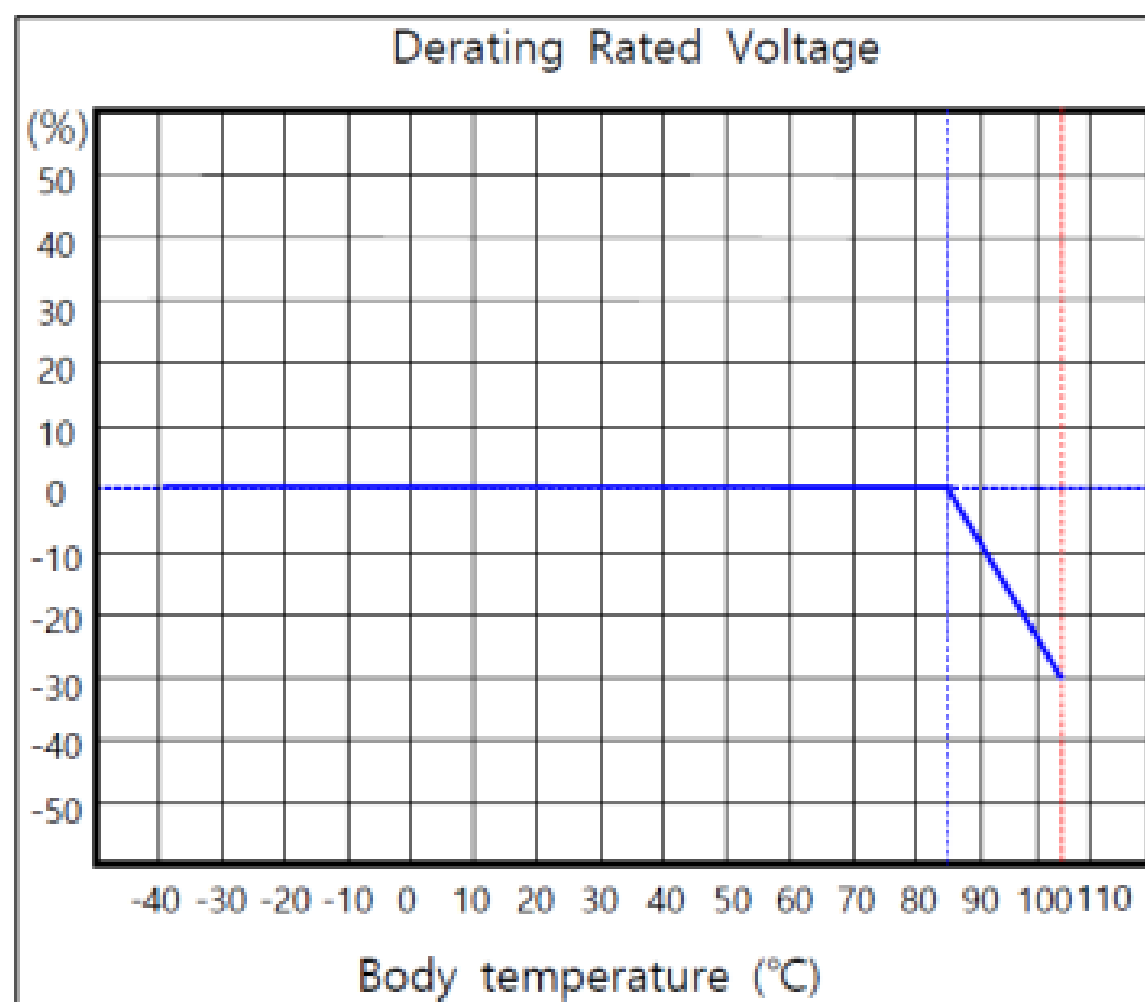
Typical Waveforms



Current (Irms) vs Temperature



Derating Voltage Vs Temperature



Disclaimer

All our capacitors are designed, manufactured and tested to specifications. We strictly adhere to standards in procurement of materials, in the laid down manufacturing processes and consistently apply stringent process controls and testing parameters. This ensures that our capacitors always perform to the offered specifications. Appropriateness of use in a specific circuit and fitness to a particular application however needs to be verified and its reliability through expected lifetime is required to be validated by the customer. Deki's responsibility is limited to ensuring that the capacitor performs as claimed in the specification/ data sheets provided by Deki. Deki specifically disclaims any implied warranties of fitness for any particular purpose. Liability, in any case is limited to the price paid for the capacitors.