



SUPER FAST DIODE MODULE TYPE 300A

Features

- High Surge Capability
- Type 1000V V_{RRM}
- Isolation Type Package
- Electrically Isolation base plate

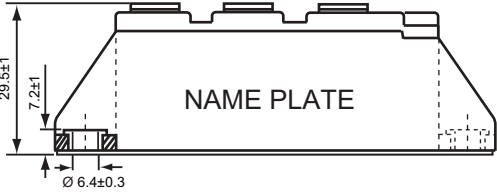
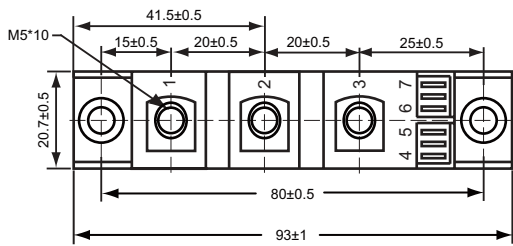
Maximum Ratings

Junction Operating Temperature : -55°C to +175°C
 Storage Temperature : -55°C to +175°C



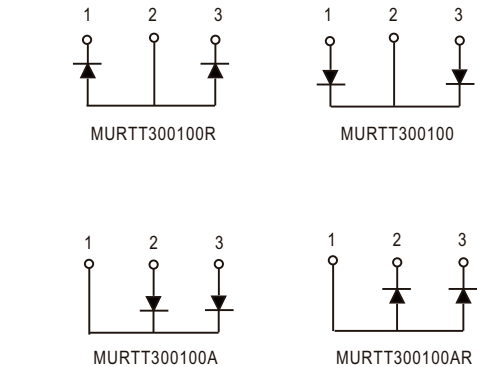
Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURTT300100(A)(R)	1000V	700V	1000V

Dimensions in mm (1 mm = 0.0394")



Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current (Per pkg)	$I_{F(AV)}$	300A	$T_C = 125^\circ C$
Peak Forward Surge Current (Per diode)	I_{FSM}	2750A	8.3ms , half sine
Maximum Instantaneous Forward Voltage* (Per diode)	V_F	2.35V	$I_{FM} = 150A; T_J = 25^\circ C$
Maximum Instantaneous Reverse Current At Rated DC Blockig Voltage* (Per diode)	I_R	25µA 3mA	$T_J = 25^\circ C$ $T_J = 125^\circ C$
Maximum Reverse Recovery Time (Per diode)	T_{rr}	135ns	$I_F = 0.5A, I_R = 1.0A$ $I_{RR} = 0.25A$
Isolation Voltage	V_{iso}	2500V	A.C. 1 minute
Maximum Thermal Resistance Junction To Case (Per diode)	$R_{\theta jc}$	0.40°C/W	
Mounting torque		4 ± 0.5Nm 3 ± 0.5Nm	to heatsink to terminal



*Pulse Test: Pulse Width 300µsec, Duty Cycle < 2%



Figure .1- Typical Forward Characteristics

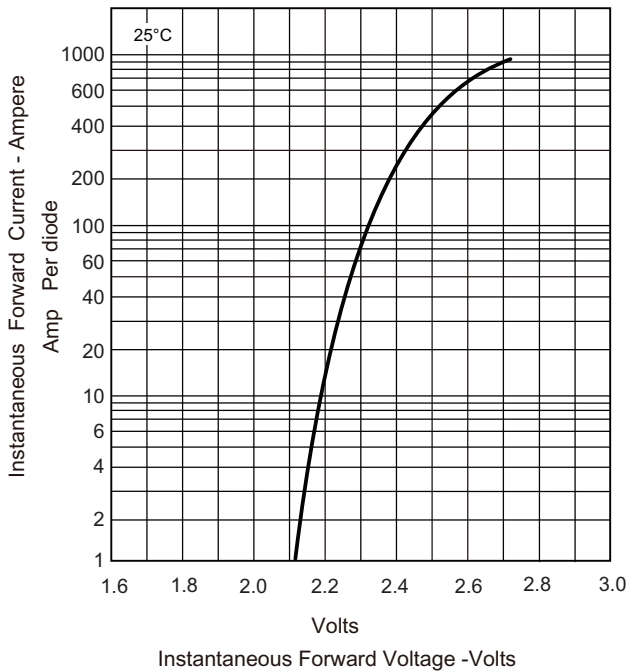


Figure .2-Forward Derating Curve

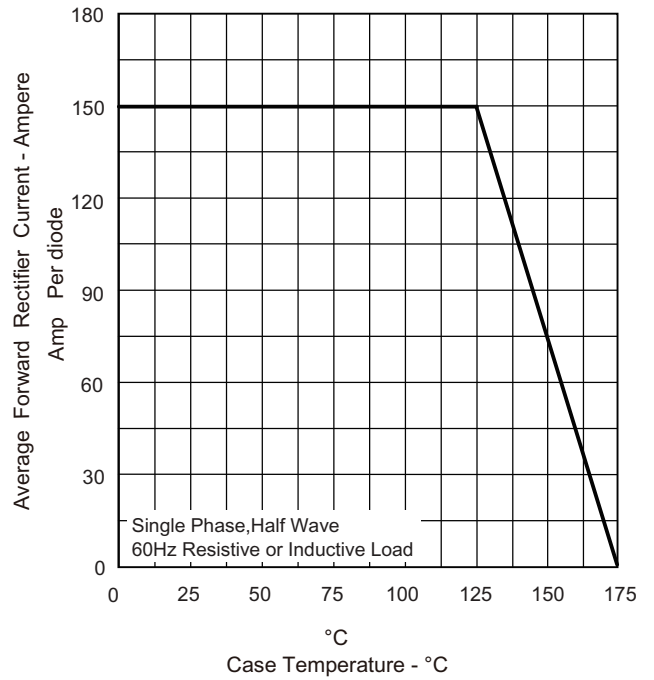


Figure .3-Peak Forward Surge Current

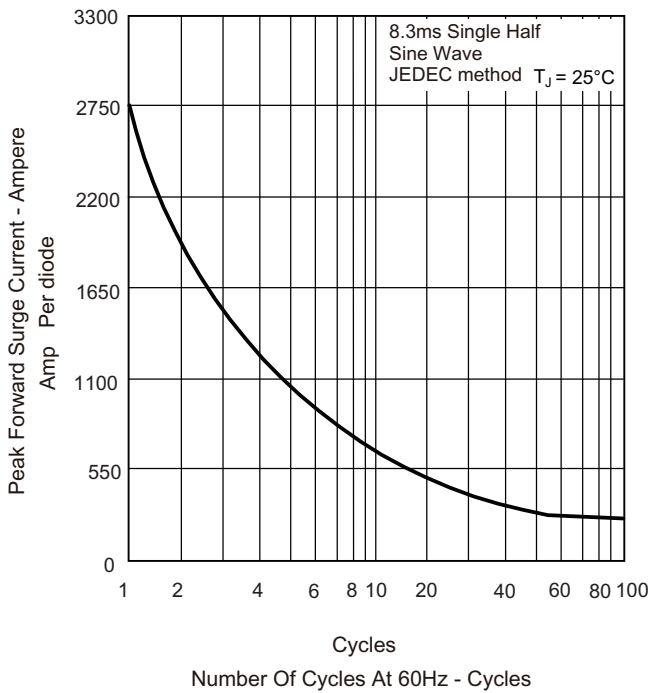
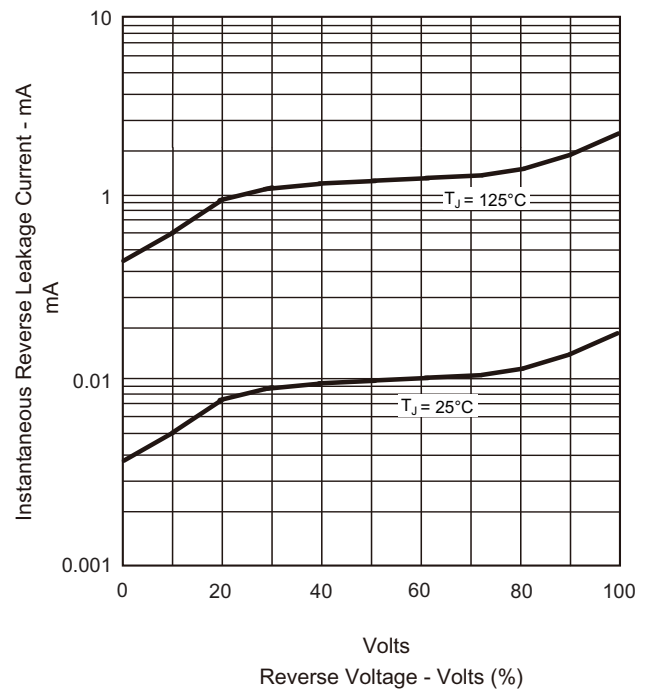


Figure .4-Typical Reverse Characteristics





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