



**SUPER FAST DIODE MODULE TYPE
300A / 1000V**

Features

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

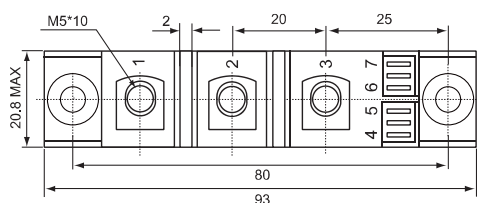
Maximum Ratings

- Operating Temperature : -55°C to $+175^{\circ}\text{C}$
- Storage Temperature : -55°C to $+175^{\circ}\text{C}$



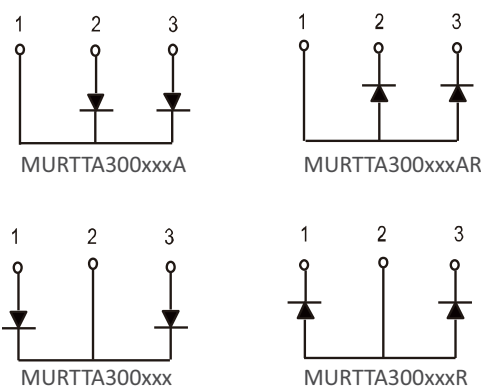
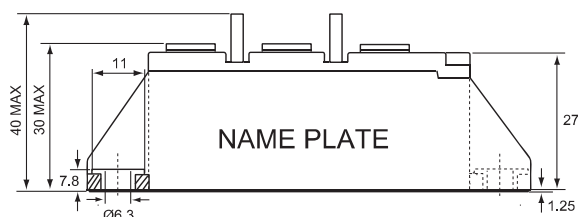
Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURTTA300100(A)(R)	1000V	700V	1000V

Dimensions in mm (1 mm = 0.0394")



Electrical Characteristics @ 25 °C Unless Otherwise Specified.

Average Forward Current (Per pkg)	$I_{F(AV)}$	300 A	$T_c=125^{\circ}\text{C}$
Peak Forward Surge Current (Per leg)	I_{FSM}	2750 A	8.3ms, half sine
Maximum Instantaneous Forward Voltage* (Per leg)	V_F	2.35 V	$I_{FM}=150\text{A}; T_J=25^{\circ}\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg)	I_R	25 μA 3 mA	$T_J=25^{\circ}\text{C}$ $T_J=125^{\circ}\text{C}$
Maximum Recovery Time Voltage (Per leg)	T_{rr}	135 ns	$I_F=0.5\text{A}, I_R=1.0\text{A}$ $I_{RR}=0.25\text{A}$
Maximum Thermal Resistance Junction To Case (Per leg)	$R_{\theta jc}$	0.40 $^{\circ}\text{C}/\text{W}$	
Isolation Voltage	V_{iso}	2500 V	A.C. 1 minute
Mounting torque		5 \pm 0.5Nm 3 \pm 0.5Nm	to heatsink to terminals



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



Figure .1- Typical Forward Characteristics

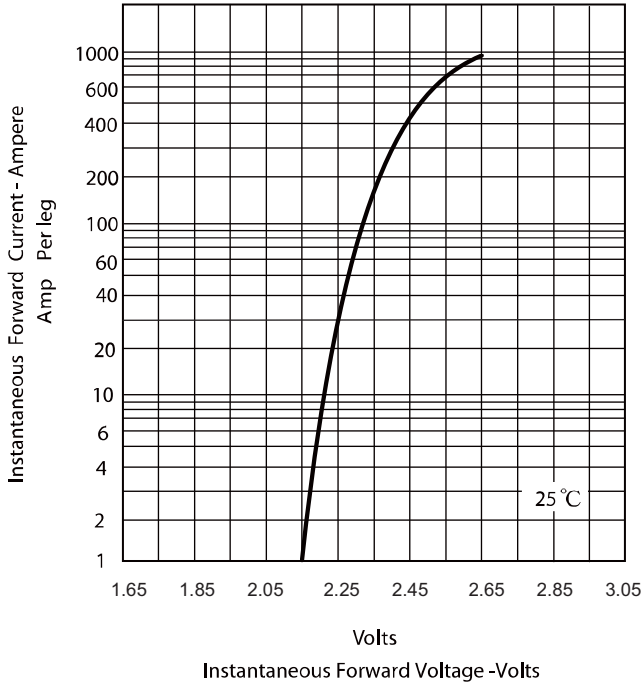


Figure .2- Forward Derating Curve

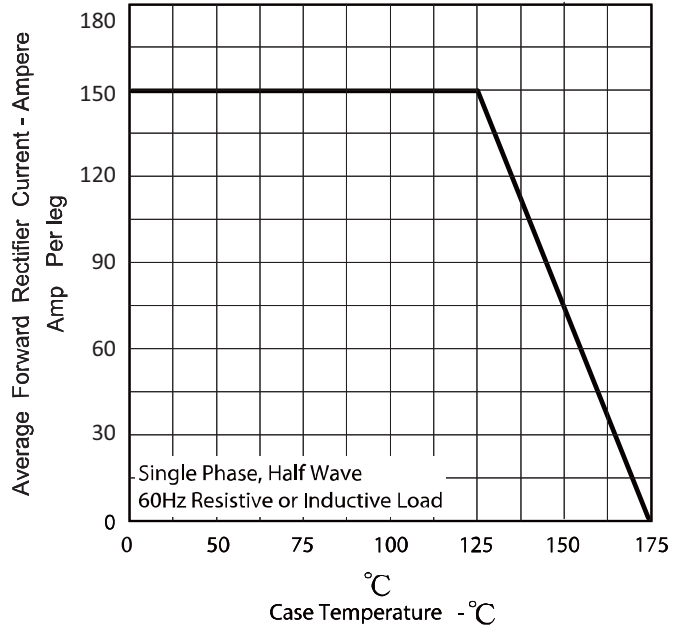


Figure.3 - Peak Forward Surge Current

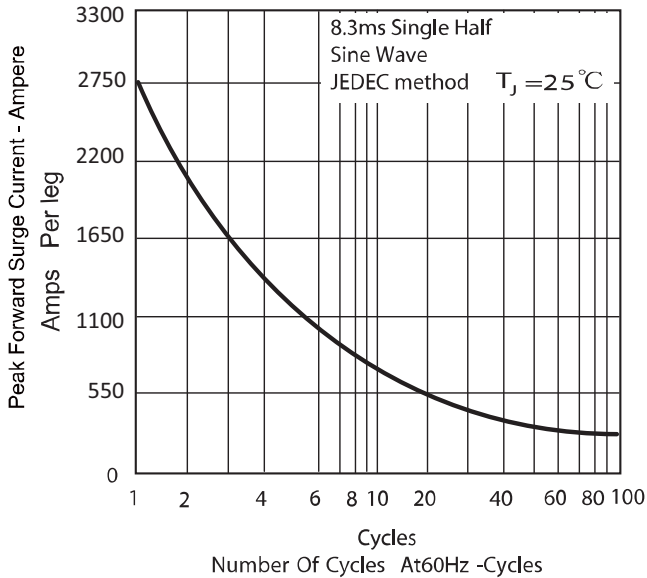
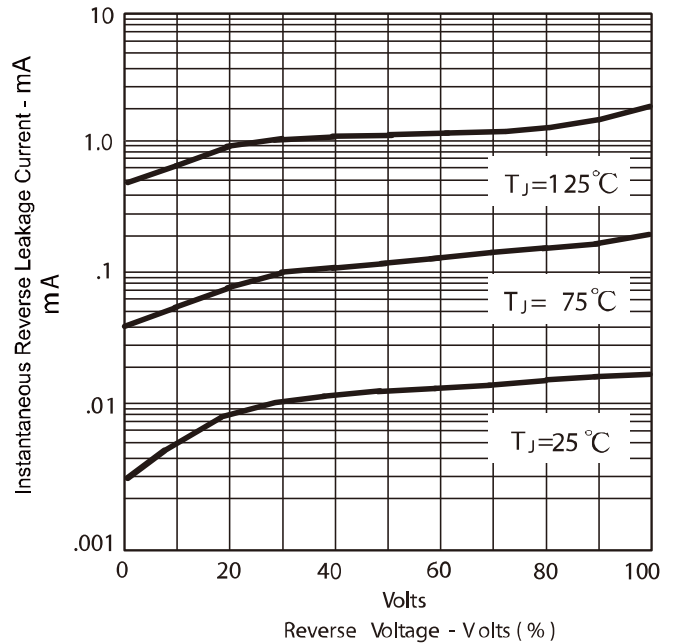


Figure .4 -Typical Reverse Characteristics





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