



**SUPER FAST DIODE MODULE TYPE  
300A / 1200V**

**Features**

- High Surge Capability
- Type 1200V  $V_{RRM}$
- Isolation Type Package
- Electrically Isolation base plate

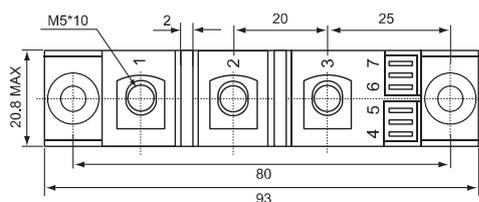
**Maximum Ratings**

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



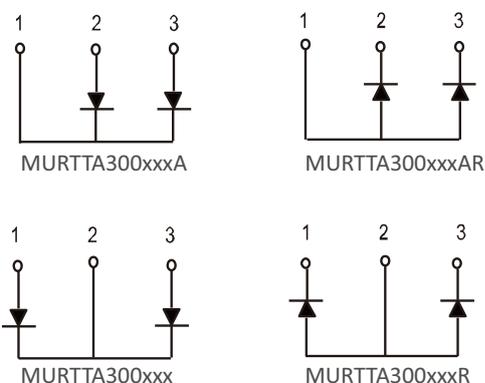
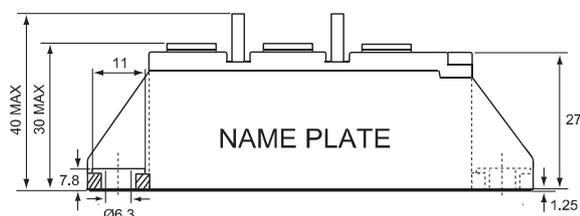
Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURTTA300120(A)(R)	1200V	840V	1200V

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 $\mu\text{A}$ 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  $\mu\text{sec}$ , Duty < 2%



Figure .1- Typical Forward Characteristics

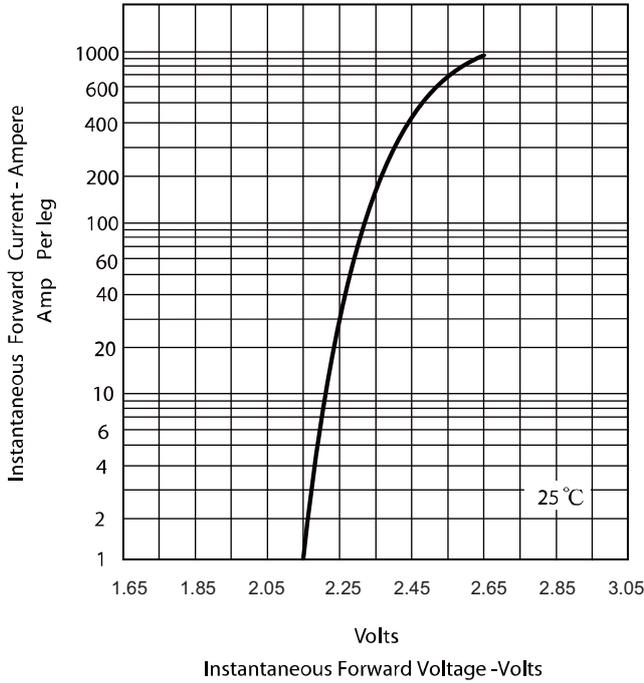


Figure .2- Forward Derating Curve

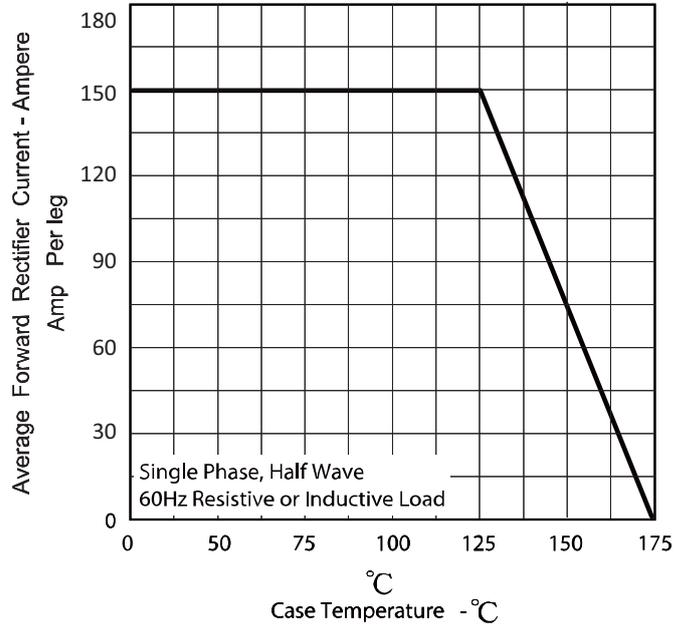


Figure.3 - Peak Forward Surge Current

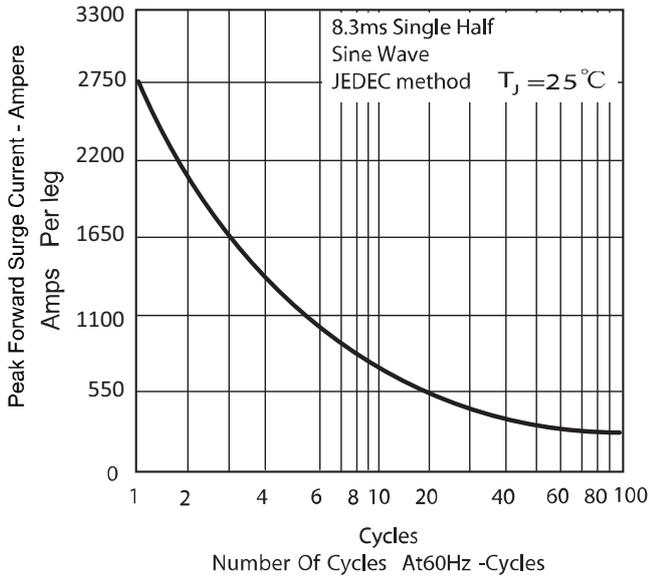
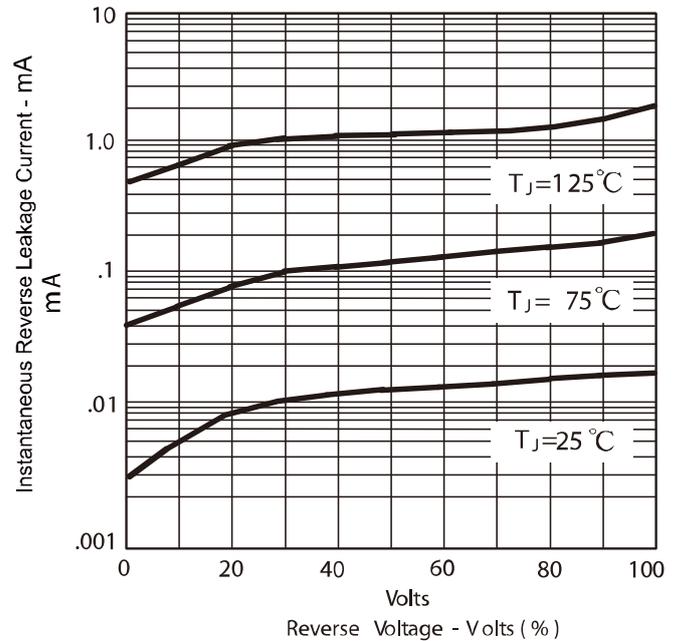


Figure .4 -Typical Reverse Characteristics





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