

SUPER FAST DIODE MODULE TYPES 300A

Features

- High Surge Capability
- Types up to 600V V_{RRM}
- Isolation Type Package
- Electrically Isolation base plate

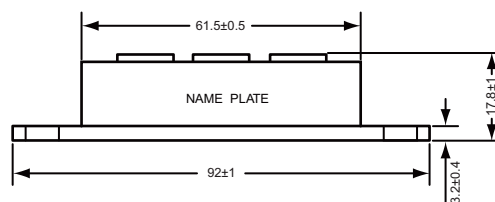
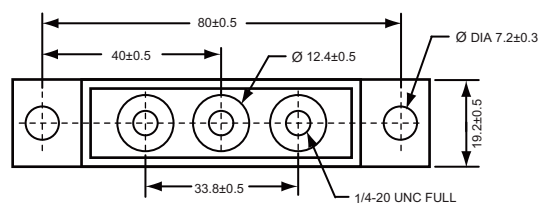


Maximum Ratings

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

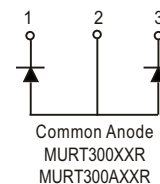
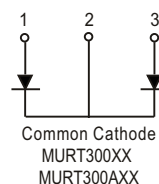
Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURT30020(R)	200V	140V	200V
MURT30040(R)	400V	280V	400V
MURT300A60(R)	600V	420V	600V

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	1.00V 1.30V 1.45V	$I_{FM}=150A;$ $T_J = 25^\circ C$
Maximum Instantaneous Reverse Current At Rated DC Blockig Voltage* (Per diode)	I_R	25 μA 1 mA	$T_J = 25^\circ C$ $T_J = 125^\circ C$
Maximum Reverse Recovery Time (Per diode)	T_{rr}	100ns 110ns 150ns	$I_F = 0.5A, I_R=1.0A,$ $I_{RR}=0.25A$
Isolation Voltage	V_{isol}	2500 V	A.C. 1minute
Maximum Thermal Resistance Junction To Case (Per diode)	$R_{\theta jc}$	0.4°C/W	
Weight		103g	



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



Figure .1- Typical Forward Characteristics

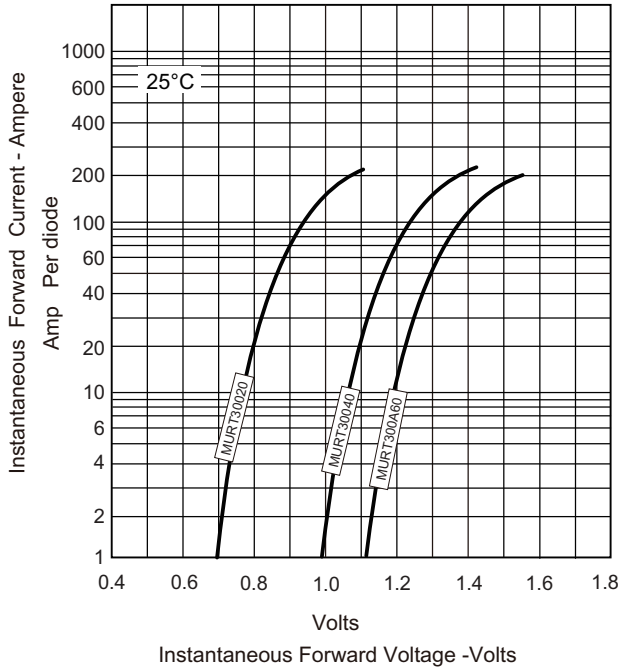


Figure .2-Forward Derating Curve

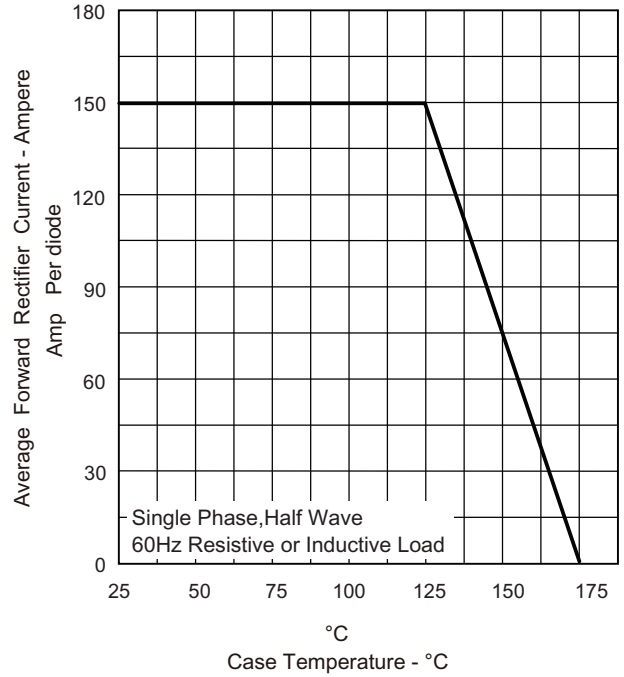


Figure .3- Peak Forward Surge Current

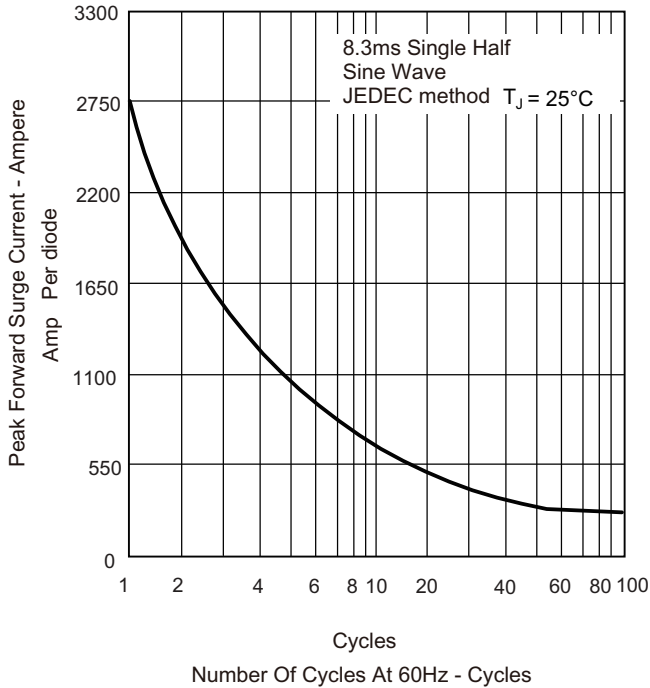
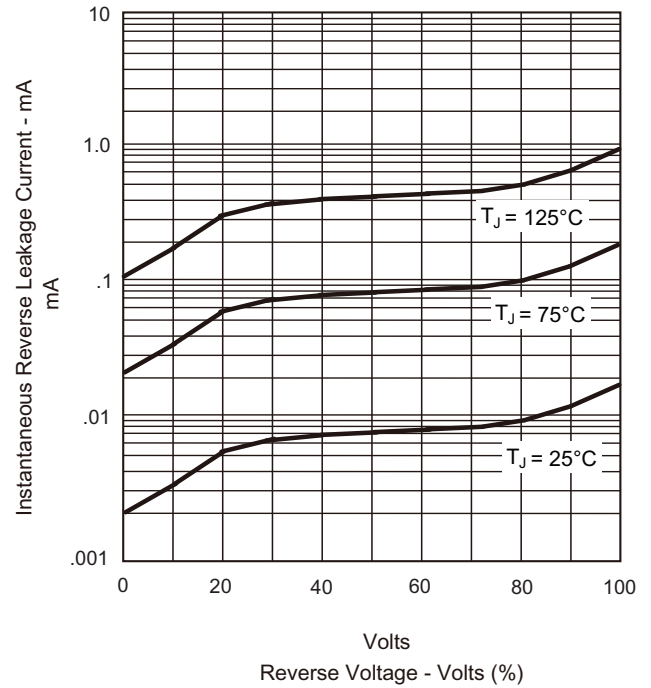


Figure .4-Typical Reverse Characteristics





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