



SUPER FAST DIODE MODULE TYPES 100A

Features

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

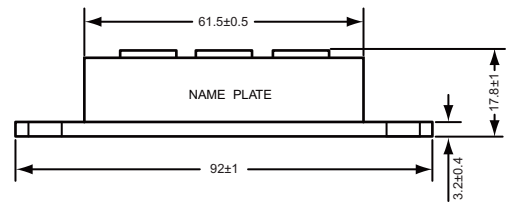
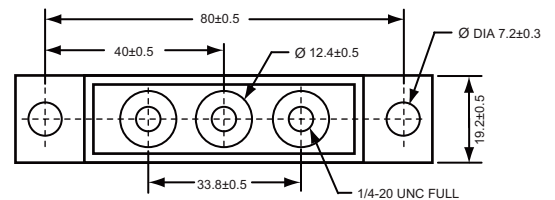


Maximum Ratings

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

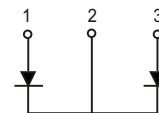
Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURT10040(R)	400V	280V	400V
MURT100A60(R)	600V	420V	600V

Dimensions in mm (1 mm = 0.0394")

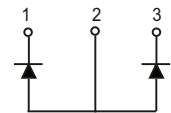


Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current (Per pkg)	$I_{F(AV)}$	100A	$T_C = 140^{\circ}C$
Peak Forward Surge Current (Per diode)	I_{FSM}	1500A	8.3ms , half sine
Maximum Instantaneous Forward Voltage* (Per diode) 400V 600V	V_F	1.30V 1.45V	$I_{FM}=50A;$ $T_J = 25^{\circ}C$
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) 400V 600V	T_{rr}	90ns 110ns	$I_F = 0.5A, I_R=1.0A,$ $I_{RR}=0.25A$
Isolation Voltage	V_{isol}	2500 V	A.C. 1minute
Maximum Thermal Resistance Junction To Case (Per diode)	$R_{\theta j c}$	1.0°C/W	
Weight		103g	



Common Cathode
MURT100XX
MURT100AXX



Common Anode
MURT100XXR
MURT100AXXR

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



Figure .1- Typical Forward Characteristics

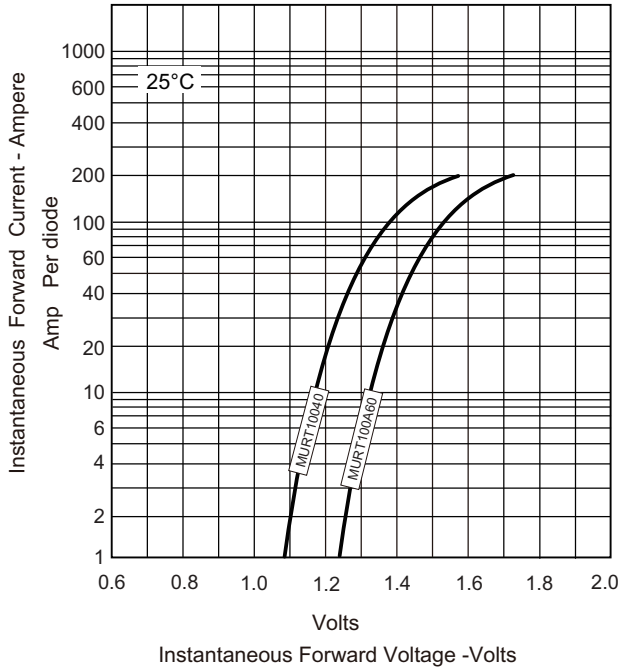


Figure .2-Forward Derating Curve

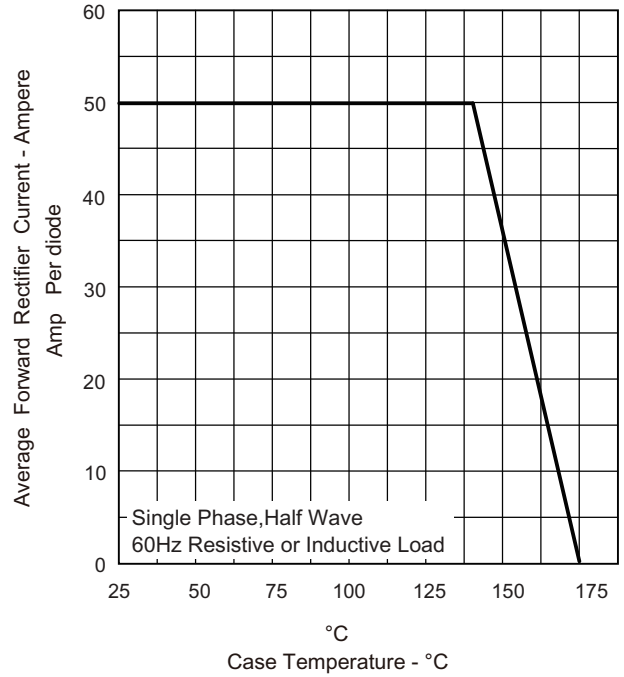


Figure .3- Peak Forward Surge Current

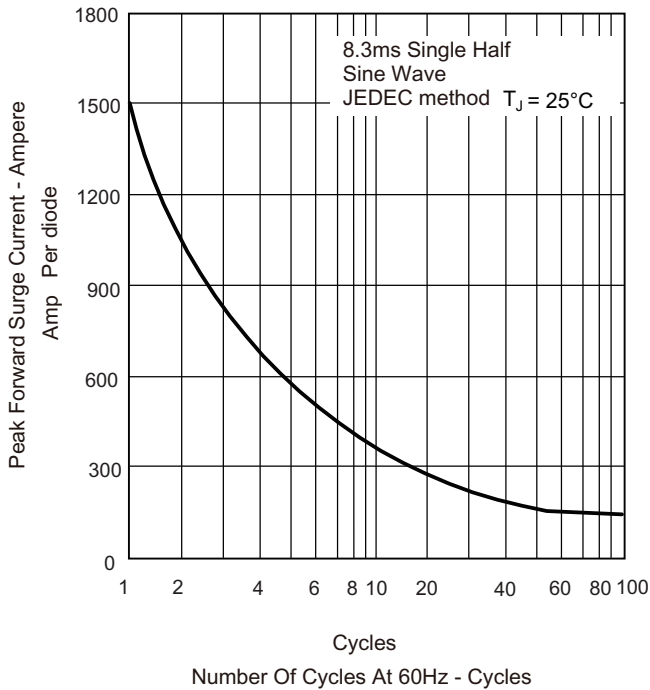
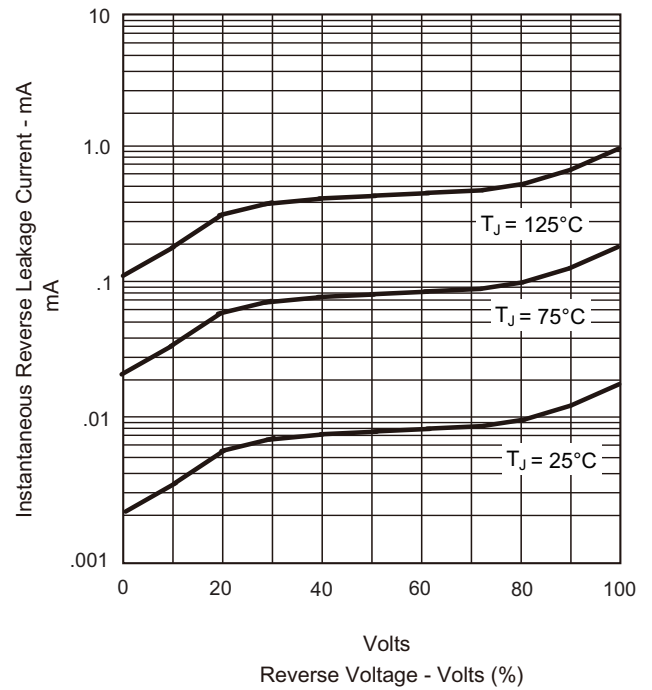


Figure .4-Typical Reverse Characteristics





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