



SUPER FAST DIODE MODULE TYPES 50A

Features

High Surge Capability
Types up to 600V V_{RRM}

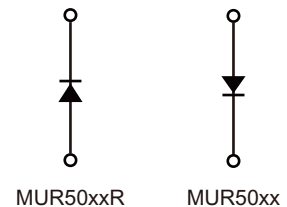
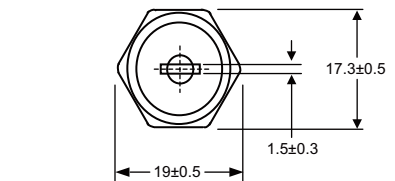
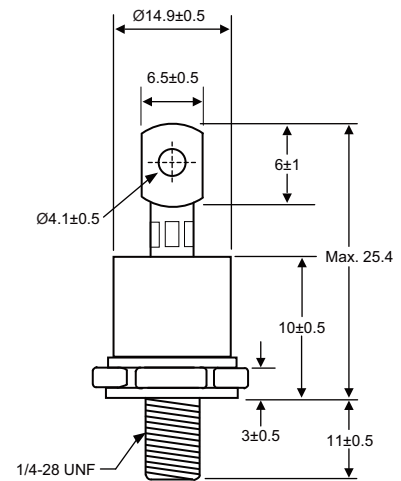
Maximum Ratings

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



Dimensions in mm (1 mm = 0.0394")

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MUR5010(R)	100V	70V	100V
MUR5020(R)	200V	140V	200V
MUR5040(R)	400V	280V	400V
MUR5060(R)	600V	420V	600V



Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current (Per pkg)	$I_{F(AV)}$	50A	$T_C = 125^{\circ}C$
Peak Forward Surge Current	I_{FSM}	800A	8.3ms , half sine
Maximum Instantaneous Forward Voltage* 100V-200V 400V 600V	V_F	1.00V 1.25V 1.45V	$I_{FM}=50A;$ $T_J = 25^{\circ}C$
Maximum Instantaneous Reverse Current At Rated DC Blockig Voltage*	I_R	10 μ A 3 mA	$T_J = 25^{\circ}C$ $T_J = 125^{\circ}C$
Maximum Reverse Recovery Time 100V-200V 400V 600V	T_{rr}	60ns 75ns 90ns	$I_F = 0.5A, I_R=1.0A,$ $I_{RR}=0.25A$
Maximum Thermal Resistance Junction To Case	$R_{\theta jc}$	0.10°C/W	
Mounting torque	Inch pounds (in-pb)	30	

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

Marking Notes :

1. R= Stud Reverse Polarity : Anode to Stud
2. None = Stud normal Polarity : Cathode to Stud



Figure .1- Typical Forward Characteristics

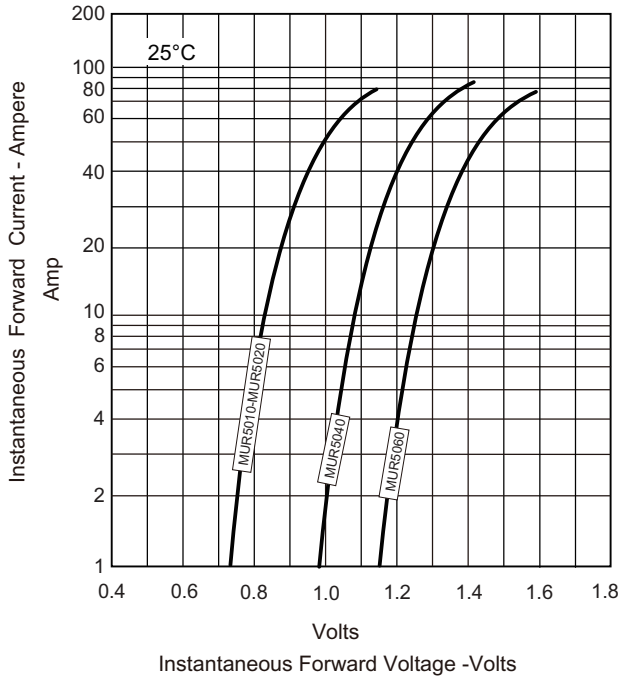


Figure .2-Forward Derating Curve

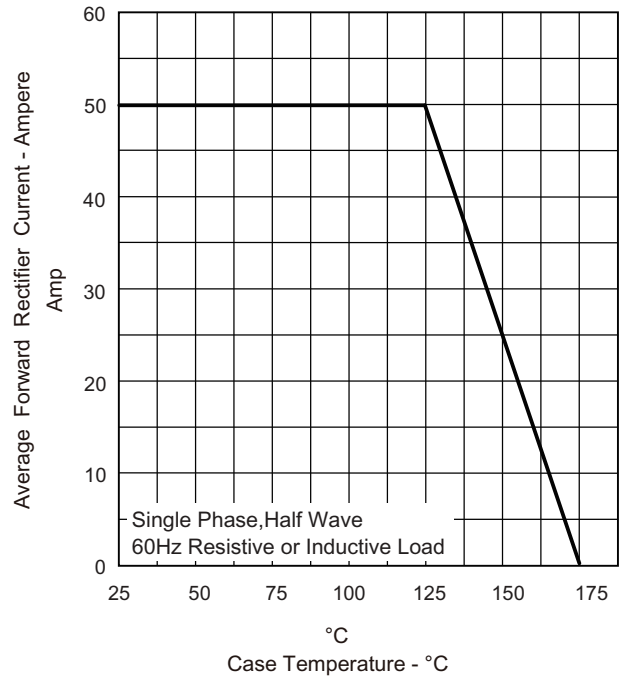


Figure .3- Peak Forward Surge Current

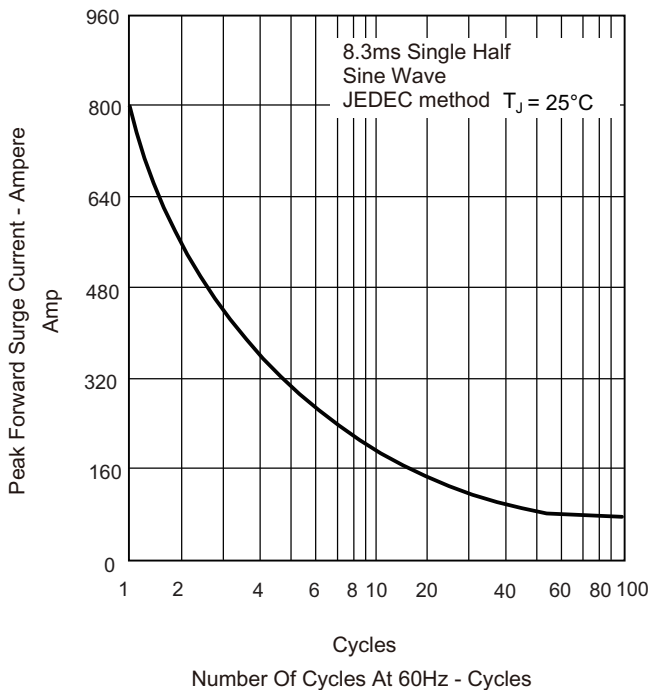
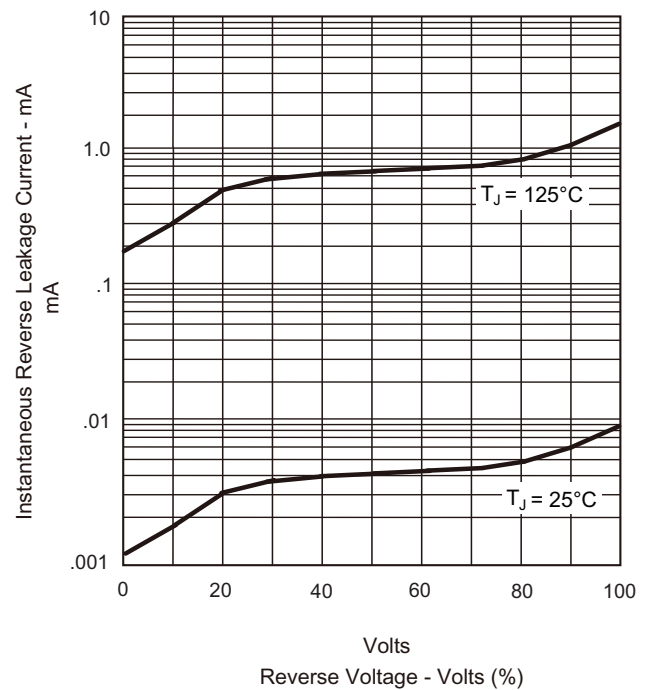


Figure .4- Typical Reverse Characteristics





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