



**SUPER FAST DIODE MODULE TYPE 450A**

**Features**

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

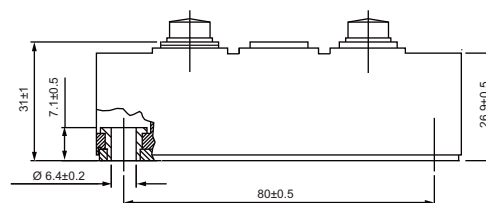


**Maximum Ratings**

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

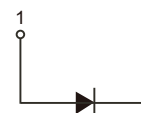
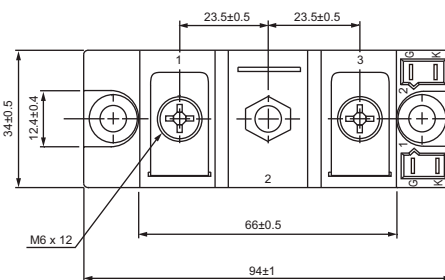
Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURIDK450120	1200V	840V	1200V

Dimensions in mm (1 mm = 0.0394")



**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Average Forward Current (Per pkg)	$I_{F(AV)}$	450A	$T_C = 100^\circ C$
Peak Forward Surge Current	$I_{FSM}$	9000A	8.3ms, half sine
Maximum Instantaneous Forward Voltage*	$V_F$	1.95V 2.15V	$I_{FM}=300A; T_J = 25^\circ C$ $I_{FM}=520A; T_J = 25^\circ C$
Maximum Instantaneous Reverse Current At Rated DC Blockig Voltage*	$I_R$	50 $\mu A$ 10mA	$T_J = 25^\circ C$ $T_J = 150^\circ C$
Maximum Reverse Recovery Time	$T_{rr}$	350ns	$I_F = 0.5A, I_R = 1.0A,$ $I_{RR} = 0.25A$
Isolation Voltage	$V_{isol}$	3000V	A.C. 1minute
Maximum Thermal Resistance Junction To Case	$R_{\theta jc}$	0.15°C/W	



\*Pulse Test: Pulse Width 300  $\mu sec$ , Duty Cycle < 2%



Figure .1- Typical Forward Characteristics

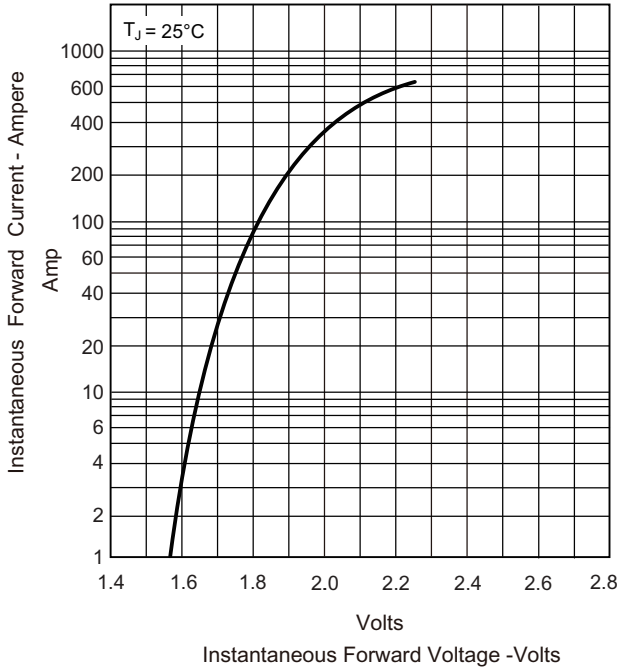


Figure .2-Forward Derating Curve

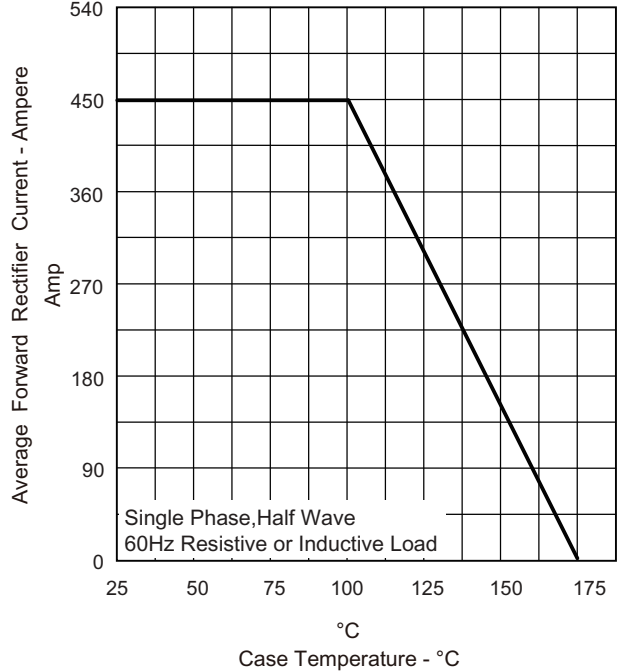


Figure .3- Peak Forward Surge Current

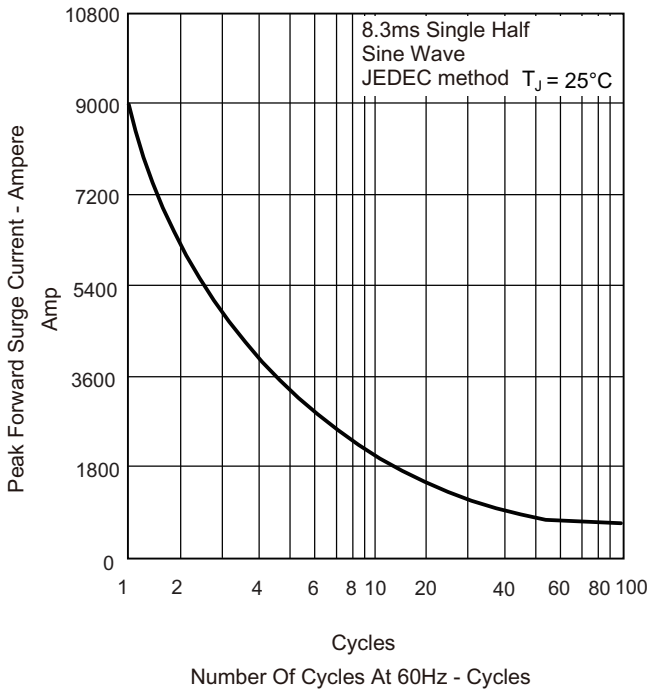
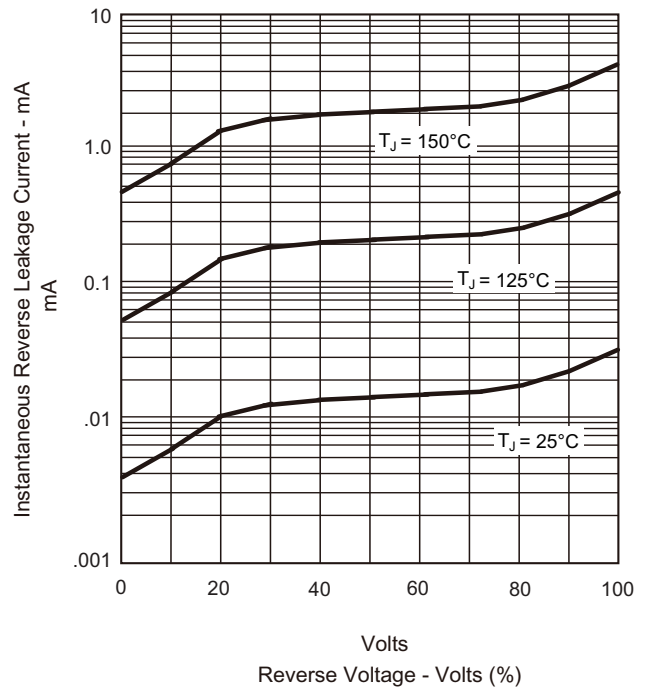


Figure .4-Typical Reverse Characteristics





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