



**SUPER FAST DIODE MODULE TYPES 300A**

**Features**

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

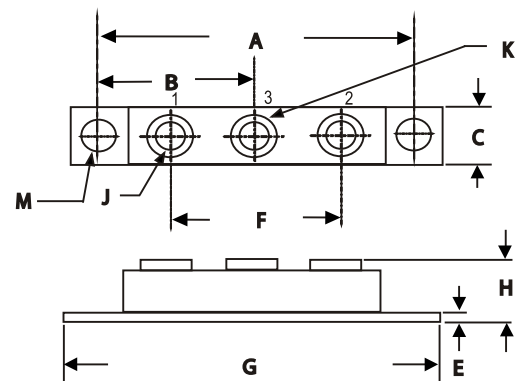
**300 Amp Rectifier**  
**50~600 Volts**

THREE TOWER

**Maximum Ratings**

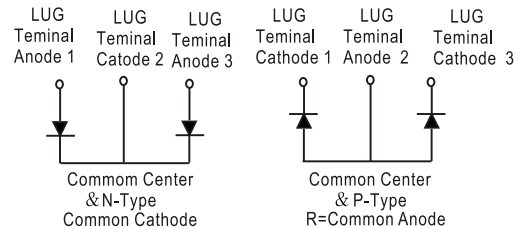
Operating Temperature: -55 °C to +175 °C  
Storage Temperature: -55 °C to +175 °C

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURT30005(R)	50V	35V	50V
MURT30010(R)	100V	71V	100V
MURT30020(R)	200V	141V	200V
MURT30040(R)	400V	283V	400V
MURT30060(R)	600V	424V	600V



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

Average Forward Current (Per pkg)	$I_{F(AV)}$	300 A	$T_C = 125^\circ C$
Peak Forward Surge Current (Per leg)	$I_{FSM}$	2750A	8.3ms , half sine
Maximum Instantaneous Forward Voltage * 30005~30020 30040 30060 (Per leg)	$V_F$	1.00 V 1.35 V 1.70 V	$I_{FM} = 150A;$ $T_J = 25^\circ C$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg)	$I_R$	25 $\mu A$ 2 mA	$T_J = 25^\circ C$ $T_J = 125^\circ C$
Maximum Reverse Recovery Time 30005~30020 30040 30060 (Per leg)	$T_{rr}$	100 ns 110 ns 150 ns	$I_F = 0.5A, I_R = 1.0A,$ $I_{RR} = 0.25A$
Maximum Thermal Resistance Junction To Case (Per leg)	$R_{\theta jc}$	0.40°C/W	



DIM	Inches		Millimeters	
	Min	Max	Min	Max
A	3.150	NOM	80.01	NOM
B	1.565	1.585	39.75	40.26
C	.700	.800	17.78	20.32
E	.119	.132	3.02	3.35
F	1.327	REF	33.72	REF
G	3.550	3.65	90.17	92.71
H	---	.73	---	18.30
J	1/4-20 UNC FULL			
K	.472	.511	12.00	13.00
M	.275	.295	6.99	7.49
N	2.380	2.46	60.50	62.50

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



Figure .1- Typical Forward Characteristics

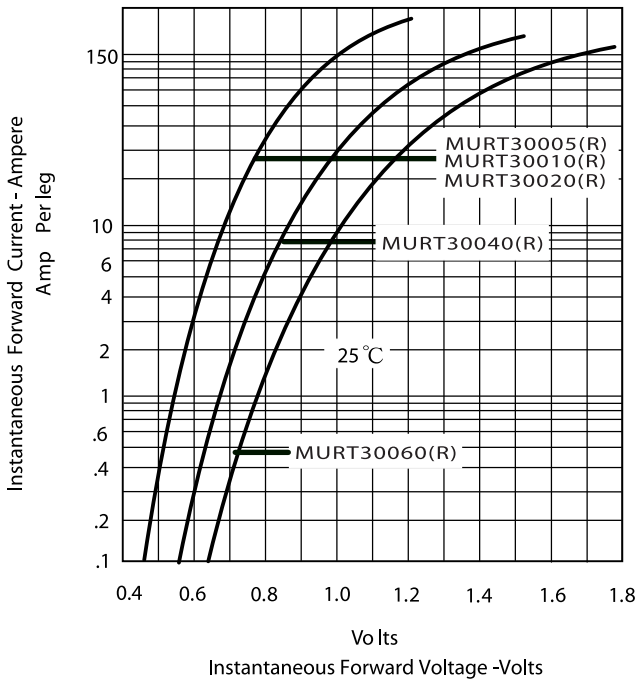


Figure .2- Forward Derating Curve

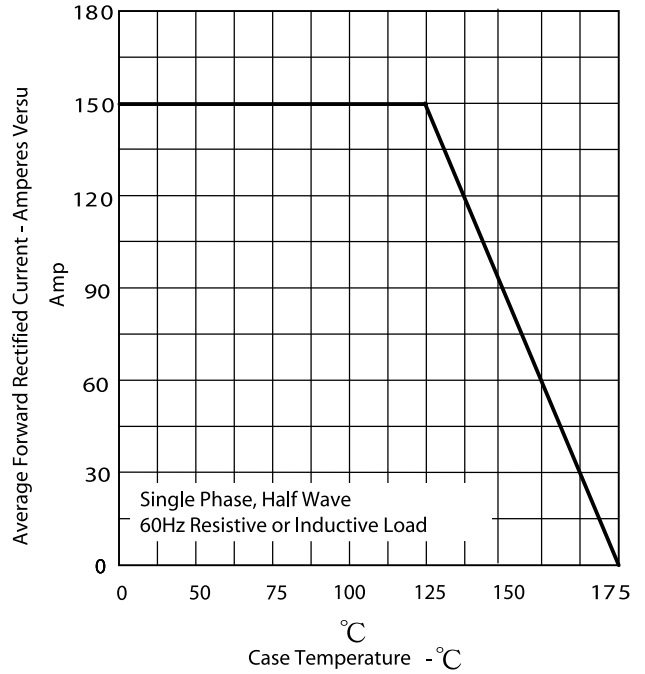


Figure.3- Peak Forward Surge Current

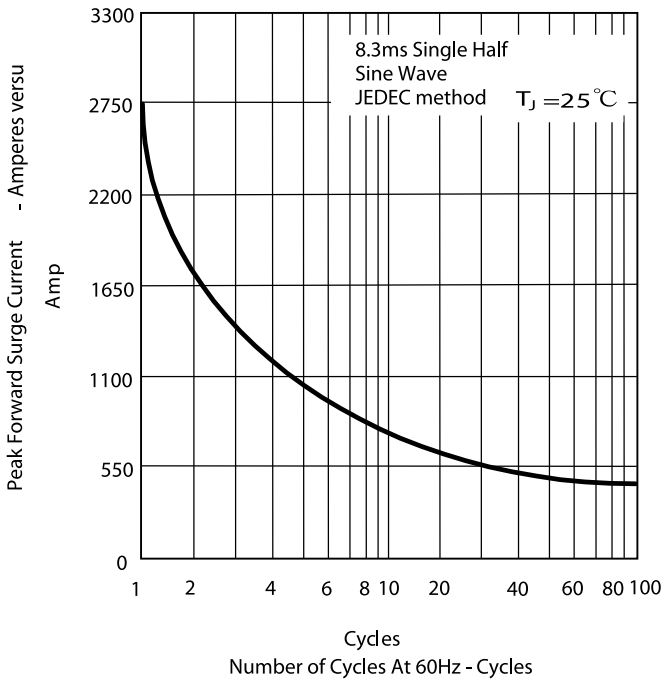


Figure .4 -Typical Reverse Characteristics

