



SCHOTTKY DIODE MODULE TYPES 500A

Features

- High surge Capability
- Types Up to 100V V_{RRM}
- Isolation Type Package
- Electrically Isolation base plate

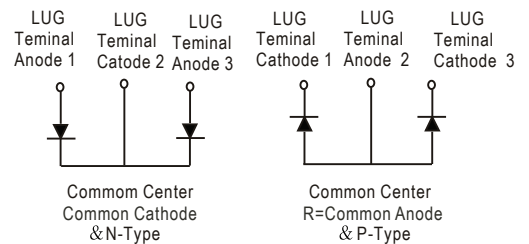
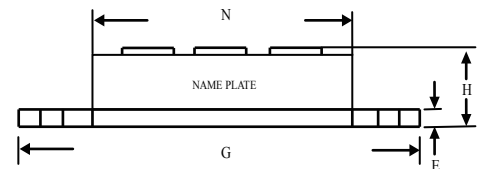
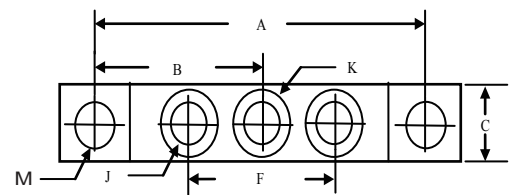
500 Amp Rectifier
20~100 Volts

Maximum Ratings

Operating Temperature: -55°C to +150 °C
Storage Temperature: -55°C to +150 °C

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRT50020(R)	20V	14V	20V
MBRT50030(R)	30V	21V	30V
MBRT50035(R)	35V	25V	35V
MBRT50040(R)	40V	28V	40V
MBRT50045(R)	45V	32V	45V
MBRT50060(R)	60V	42V	60V
MBRT50080(R)	80V	56V	80V
MBRT500100(R)	100V	70V	100V

THREE TOWER



Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current (Per pkg)	I _{F(AV)}	500A	T _C =125 °C
Peak Forward Surge Current (Per leg)	I _{FSM}	3500A	8.3ms, half sine
Maximum Instantaneous Forward Voltage (Per leg) 20V~45V 50V~60V 80V~100V	V _F	0.75V 0.78V 0.84V	I _{FM} =250A; T _J =25 °C
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg) NOTE (1)	I _R	1 mA 10 mA 50 mA	T _J = 25 °C T _J = 100 °C T _J = 150 °C
Maximum Thermal Resistance Junction To Case (Per leg)	R _{θjc}	0.30 °C/W	

NOTE :

(1) Pulse Test: Pulse Width 300 μ sec, Duty < 2%

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	3.55	3.65	90.17	92.71
H	----	.73	----	18.30
J	1/4-20 UNC FULL			
K	.472	.511	12	13
M	.275	.295	6.99	7.49
N	2.38	2.46	60.5	62.5



Figure.1-Typical Forward Characteristics

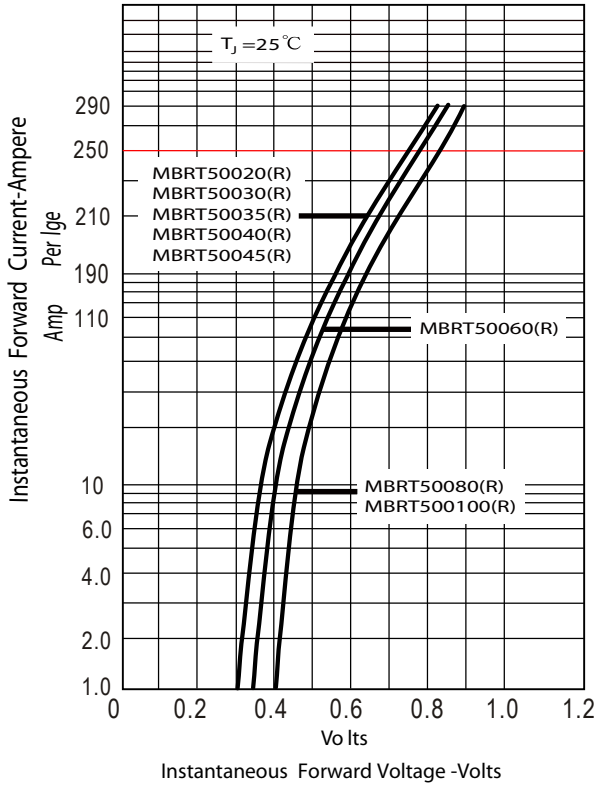


Figure.2-Forward Derating Curve

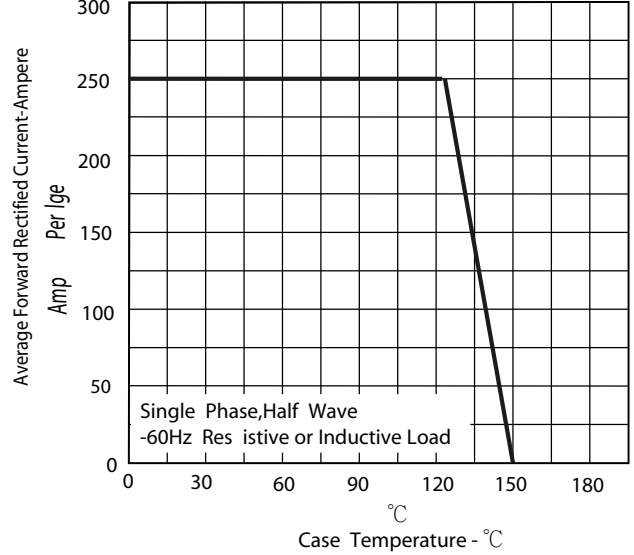


Figure.3-Peak Forward Surge Current

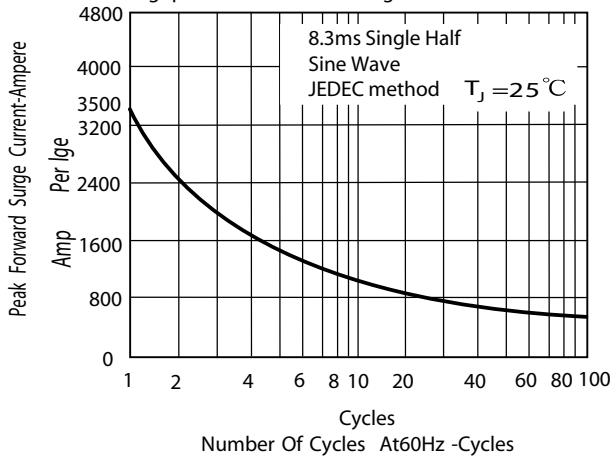


Figure.4-Typical Reverse Characteristics

