



SCHOTTKY DIODE MODULE TYPES 500A

Features

- High Surge Capability
- Types Up to 100V VRRM
- Isolation Type Package
- Electrically Isolation Baseplate

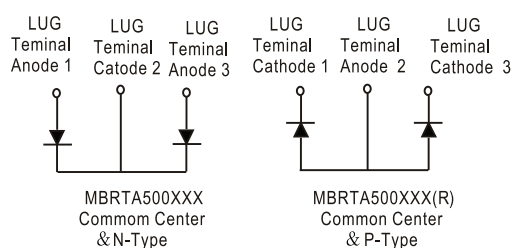
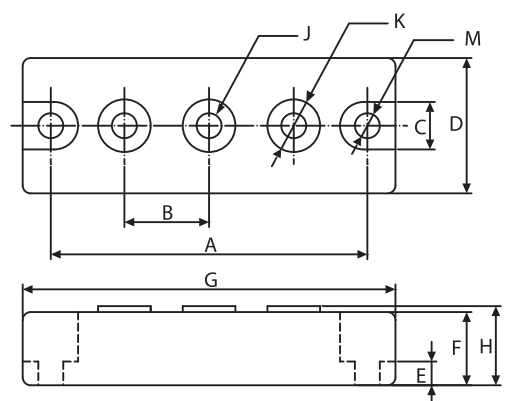
**500Amp Rectifier
20-100 Volts**

HEAVY THREE TOWER

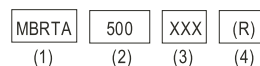
Maximum Ratings

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
MBRTA50020(R)	20V	14V	20V
MBRTA50030(R)	30V	21V	30V
MBRTA50035(R)	35V	25V	35V
MBRTA50040(R)	40V	28V	40V
MBRTA50045(R)	45V	32V	45V
MBRTA50060(R)	60V	42V	60V
MBRTA50080(R)	80V	56V	80V
MBRTA500100(R)	100V	70V	100V



Ordering code



- (1) MBRTA for Schottky diode modules & Isolation
- (2) Maximum average current, Ampere
- (3) Voltage code, VRRM

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current (Per pkg)	$I_{F(AV)}$	500A	$T_c = 100^\circ C$
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	0.70V 0.75V 0.84V	$I_{FM} = 250A ; T_J = 25^\circ C$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg) NOTE (1)	I_R	1 mA 10 mA 50 mA	$T_J = 25^\circ C$ $T_J = 100^\circ C$ $T_J = 150^\circ C$
Maximum Thermal Resistance Junction To Case (Per leg)	$R_{\theta jc}$	0.30°C/W	

NOTE :

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

DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	MIN 3.150	MAX NOM	MIN 80.01	MAX NOM	
B	.872	.892	22.15	22.65	
C	.465	.479	11.82	12.18	
D	1.337	1.356	33.95	34.45	
E	.230	.234	5.84	6.16	
F	.725	REF	18.42	REF	
G	3.668	3.768	93.17	95.71	
H	---	.791	---	20.10	
J	1/4-20 UNC FULL				
K	.509	.538	12.92	13.68	Ø
M	.238	.258	6.05	6.55	Ø



Figure.1-Typical Forward Characteristics

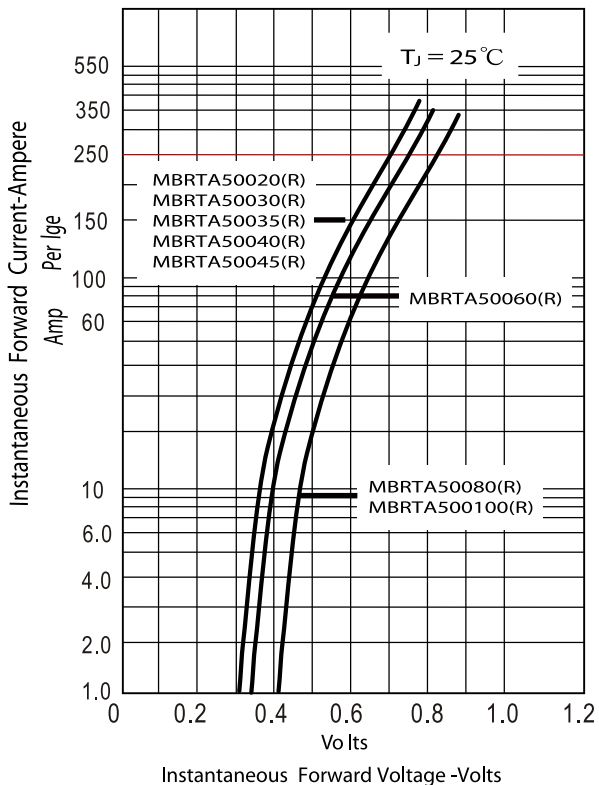


Figure.2-Forward Derating Curve

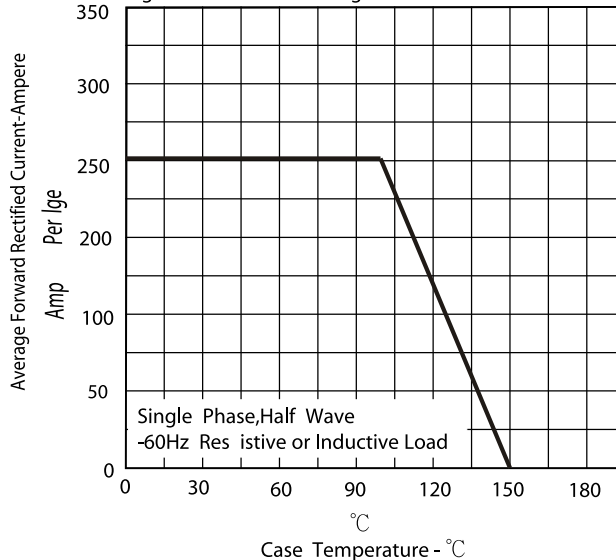


Figure.3-Peak Forward Surge Current

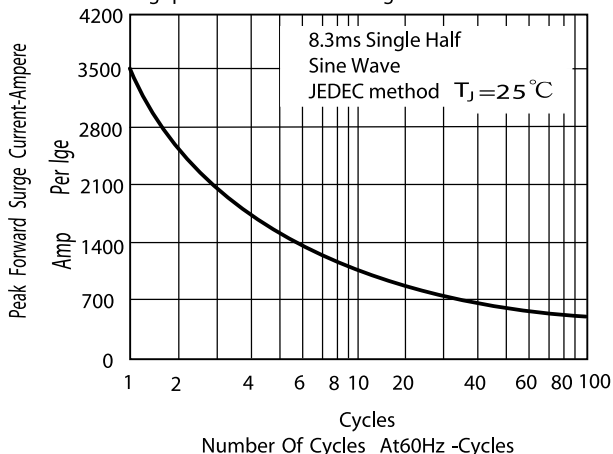


Figure.4-Typical Reverse Characteristics

