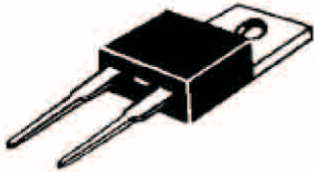


Schottky Barrier Rectifiers



Using the schottky barrier principle with a refractory metal capable of high temperature operation metal. The proprietary barrier technology allows for reliable operation up to 175°C junction temperature. Typical application are in switching mode power supplies such as adaptors, DC/DC converters, free-wheeling and polarity protection diodes.

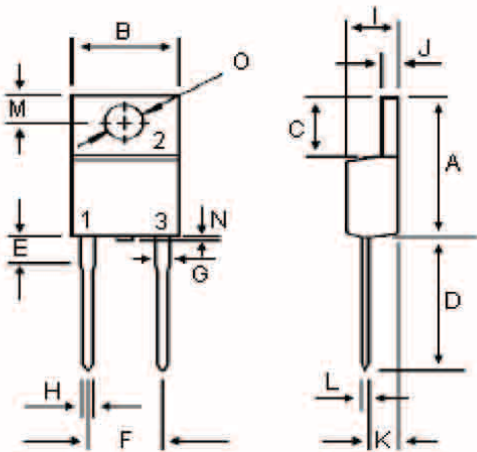
Features:



- Low forward voltage.
- Low switching noise.
- High current capacity.
- Guarantee reverse avalanche.
- Guard-ring for stress protection.
- Low power loss and high efficiency.
- 175°C operating junction temperature.
- Low stored charge majority carrier conduction.
- Plastic material used carries Underwriters Laboratory Flammability classification 94V-O.

10 Amperes
100 Volts

TO-220A



Dimensions : Millimetres

DIM	MILLIMETERS	
	MIN	MAX
A	14.68	15.32
B	9.78	10.42
C	6.02	6.52
D	13.06	14.62
E	3.57	4.07
F	4.84	5.32
G	1.12	1.36
H	0.72	0.96
I	4.22	4.98
J	1.14	1.38
K	2.20	2.98
L	0.33	0.55
M	2.48	2.98
N	---	1.00
O	3.70	3.90

Maximum Ratings

Characteristic	Symbol	MBRA10100	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	100	V
RMS Reverse Voltage	$V_R (RMS)$	70	
Average Rectifier Forward Current Total Device (Rated V_R), $T_C = 125^\circ\text{C}$	$I_F (AV)$	10	
Peak Repetitive Forward Current (Rate V_R , Square Wave, 20kHz)	I_{FM}	20	A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions half-wave, single phase, 60Hz)	I_{FSM}	150	
Operating and Storage Junction Temperature Range	T_J, T_{stg}	-65 to +175	$^\circ\text{C}$

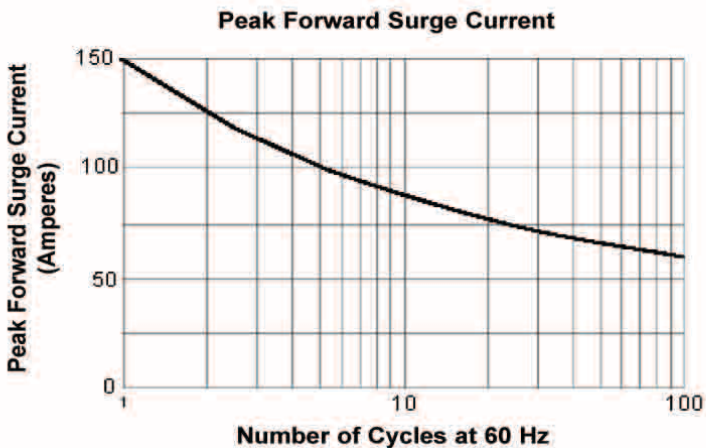
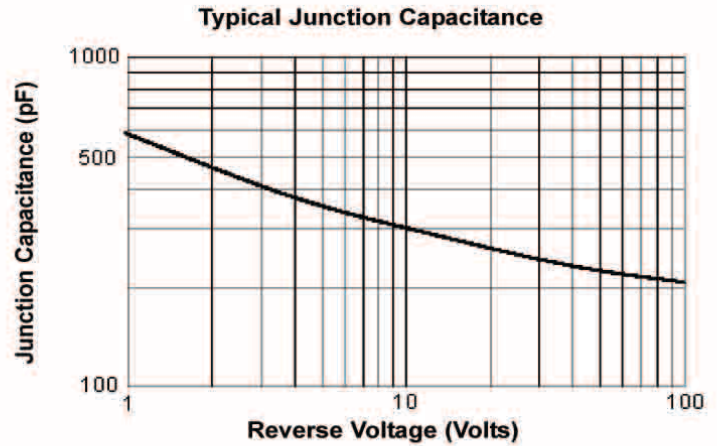
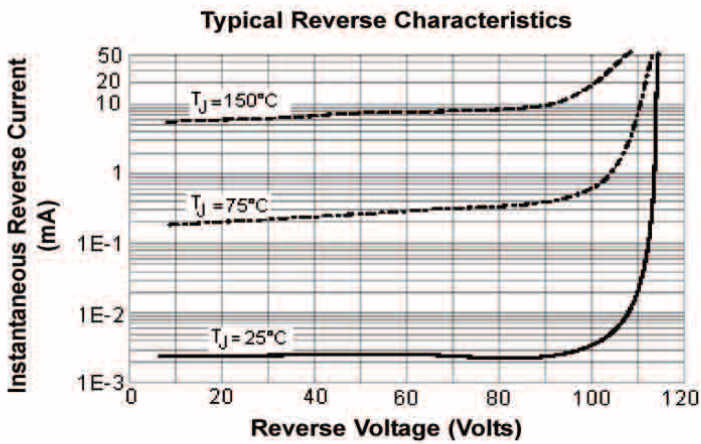
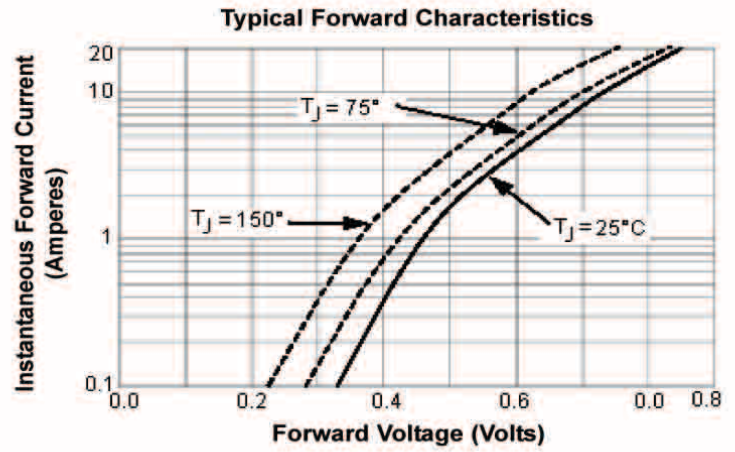
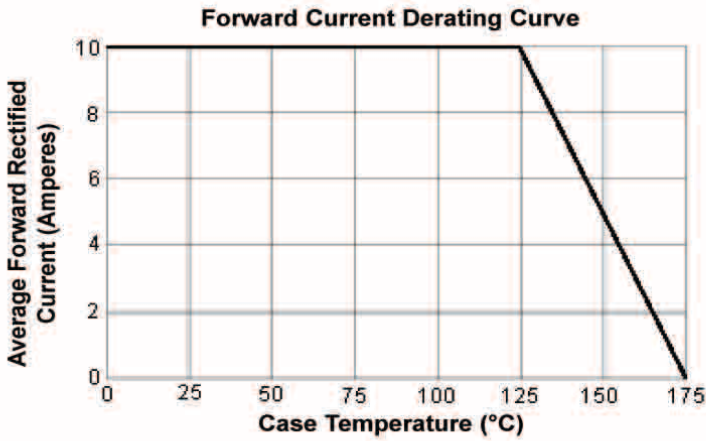
Thermal Resistances

Operating and Storage Junction Temperature Range	$R_{\theta jc}$	3.4	$^\circ\text{C/W}$
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Electrical Characteristics

Characteristic	Symbol	MBRA10100	Units
Maximum Instantaneous Forward Voltage ($I_F = 10$ Amperes $T_C = 25^\circ\text{C}$) ($I_F = 10$ Amperes $T_C = 125^\circ\text{C}$)	V_F	0.85 0.76	V
Maximum Instantaneous Reverse Current (Rated DC Voltage, $T_C = 25^\circ\text{C}$) (Rated DC Voltage, $T_C = 125^\circ\text{C}$)	I_R	0.01 10	mA

Schottky Barrier Rectifiers



Schottky Barrier Rectifiers



Part Number Table

Description	Part Number
Schottky Barrier Rectifiers	MBRA10100



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