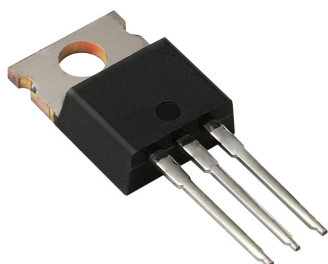


RoHS
Compliant



Description

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-0

Specifications

Reverse Voltage : 100 Volts

Forward Current : 20 Amperes

Maximum Ratings

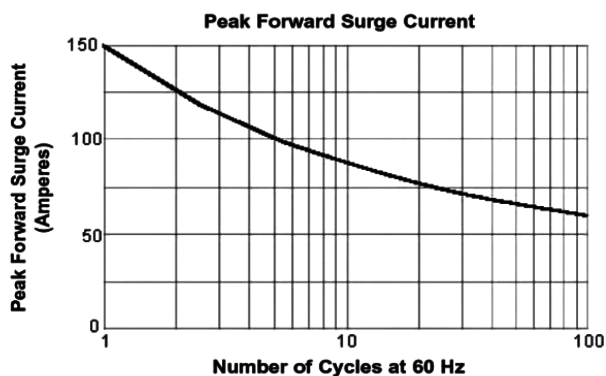
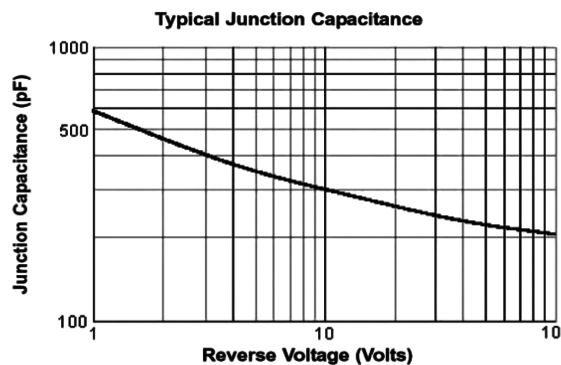
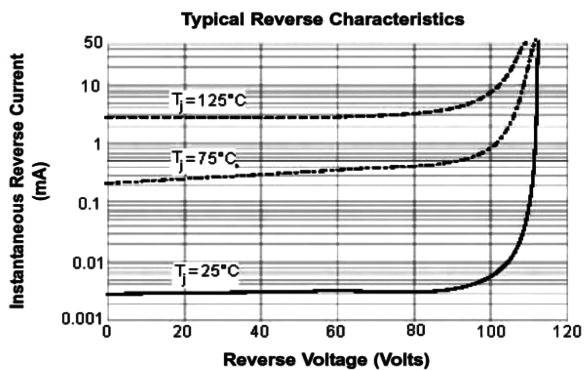
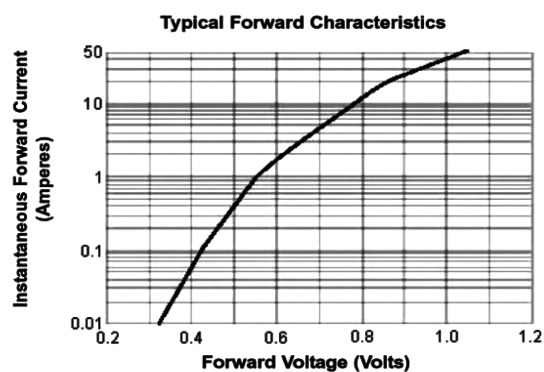
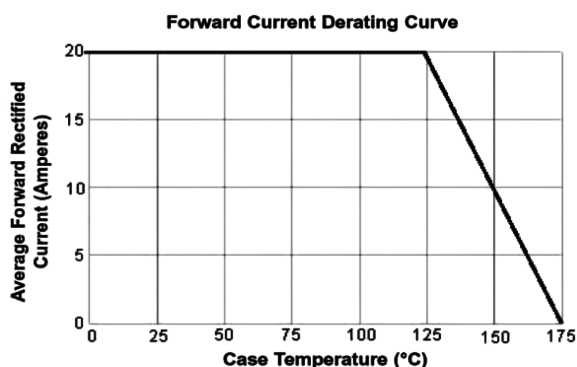
Characteristic	Symbol	Values	Units
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	70	
Average Rectifier Forward Current	$I_{F(AV)}$	10	A
Total Device (Rated V_R), $T_C = 125^\circ\text{C}$		20	
Peak Repetitive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

Thermal Resistances

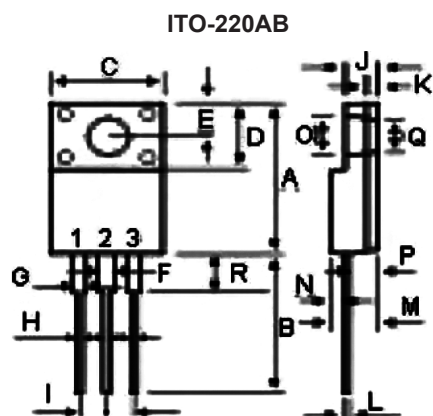
Typical Thermal Resistance junction to case	$R_{\theta JC}$	3.4	$^\circ\text{C/W}$
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Electrical Characteristics

Characteristic	Symbol	Values	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



Diagram



Common Cathode



Dim.	Min.	Max.	Dim.	Min.	Max.
A	15.05	15.15	J	3	3.2
B	13.35	13.45	K	1.1	1.2
C	10	10.1	L	0.55	0.65
D	6.55	6.65	M	4.4	4.6
E	2.65	2.75	N	115	1.25
F	1.55	1.65	O	3.35	3.45
G	1.15	1.25	P	2.65	2.75
H	0.55	0.65	Q	3.15	3.25
I	2.5	2.6	R	3.6	3.8

Dimensions : Millimetres

Part Number Table

Description	Part Number
Schottky Barrier Rectifier, 100V	MBRF20100C

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