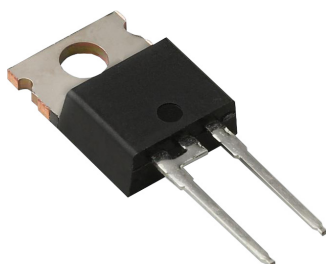


RoHS
Compliant



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

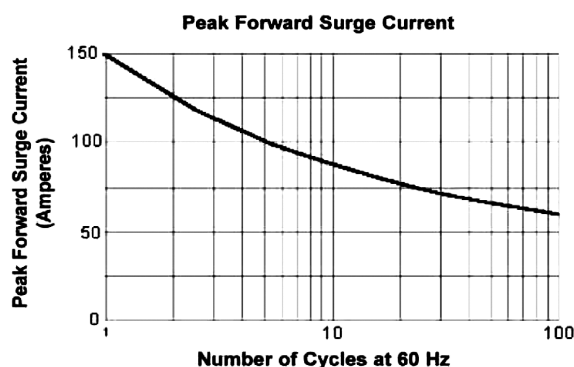
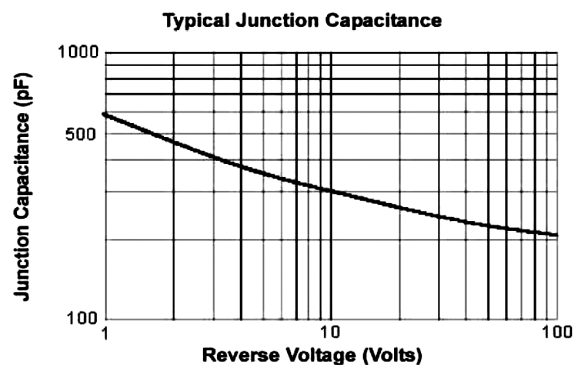
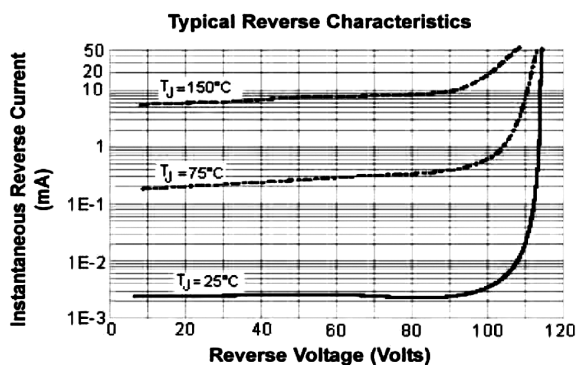
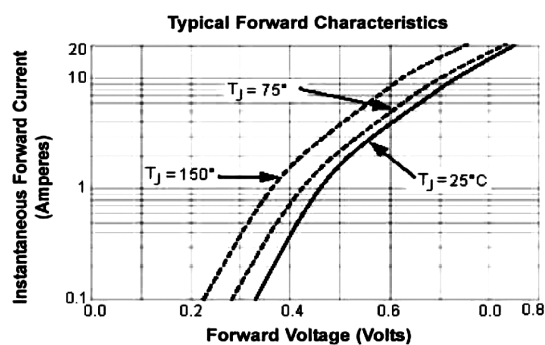
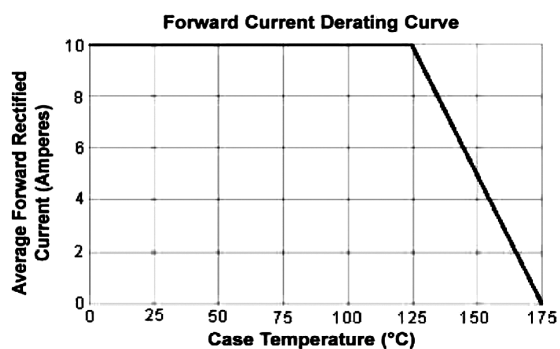
Characteristic	Symbol	Values	Units
Peak Repetitive Reverse Voltage	VRRM	100	V
Working Peak Reverse Voltage	VRWM		
DC Blocking Voltage	VR		
RMS Reverse Voltage	VR(RMS)	70	
Average Rectifier Forward Current Total Device (Rated VR), Tc = 125°C	IF(AV)	10	A
Peak Repetitive Forward Current (Rate VR, Square Wave, 20kHz)	IFM	20	
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions half-wave, single phase, 60Hz)	IFSM	150	
Operating and Storage Junction Temperature Range	TJ, TSTG	-65 to +175	°C

Thermal Resistances

Typical Thermal Resistance junction to case	RθJC	3.4	°C/W
---	------	-----	------

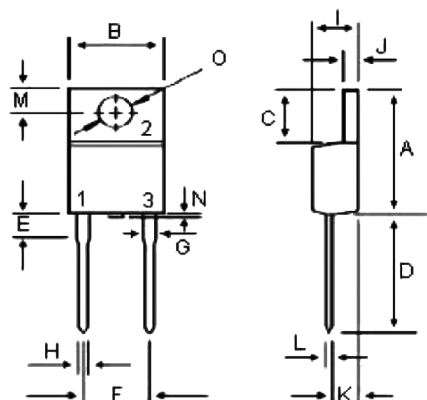
Electrical Characteristics

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

TO-220A



Dim.	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

Dim.	Min.	Max.
I	4.22	4.98
J	1.14	1.38
K	2.2	2.98
L	0.33	0.55
M	2.48	2.98
N	-	1
O	3.7	3.9

Dimensions : Millimetres

Part Number Table

Description	Part Number
Schottky Barrier Rectifier, 100V	MBR10100

Important Notice : This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.