

**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 : 200 Volts  
Forward Current : 20 Amperes

## Mechanical Data

Case : JEDE C ITO-220AB moulded plastic body.  
Terminals : Plated lead, solderable per MIL-STD-750, method 2026.  
Max. mounting Torque : 5 in-lbs.  
Weight : 1.7g approximately

## Maximum Ratings

Characteristic	Symbol	Values	Units
Peak Repetitive Reverse Voltage	$V_{RRM}$	200	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	140	
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 (Rate $V_R$ , Square Wave, 20kHz)	$I_{FM}$	20	
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

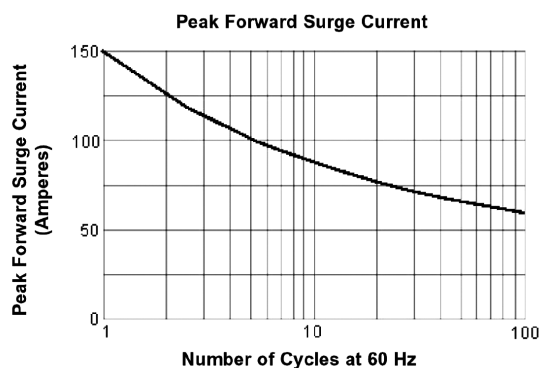
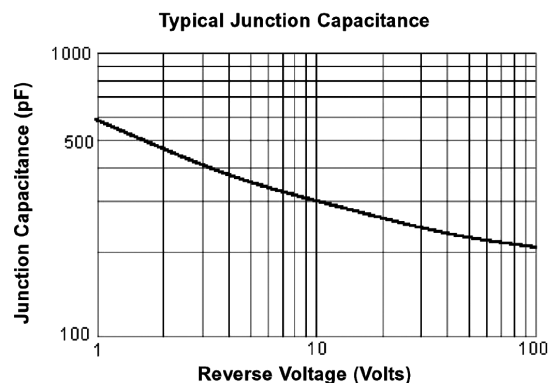
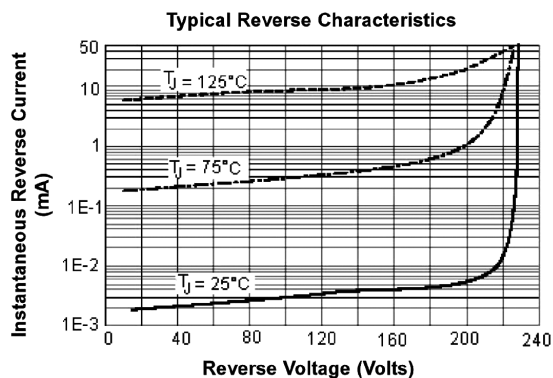
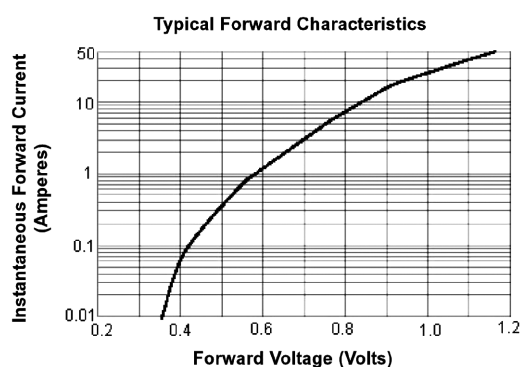
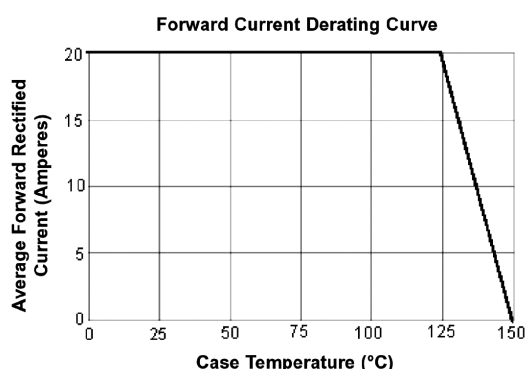
Typical Thermal Resistance junction to case	$R_{\theta JC}$	3.8	$^\circ\text{C/W}$
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Farnell.com/multicomp-pro  
Element14.com/multicomp-pro

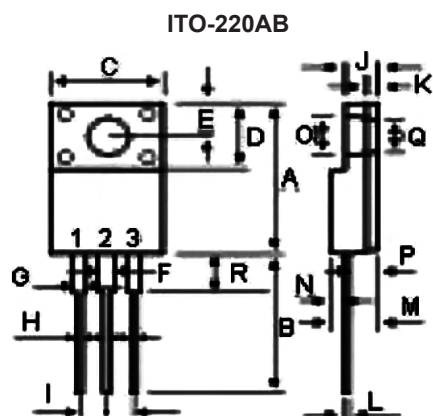
**multicomp<sup>PRO</sup>**

## Electrical Characteristics

Characteristic	Symbol	Values	Units
Maximum Instantaneous Forward Voltage ( $I_F = 10$ Amperes $T_C = 25^\circ\text{C}$ ) ( $I_F = 10$ Amperes $T_C = 125^\circ\text{C}$ )	$V_F$	0.95 0.85	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.
A	15.05	15.15
B	13.35	13.45
C	10	10.1
D	6.55	6.65
E	2.65	2.75
F	1.55	1.65
G	1.15	1.25
H	0.55	0.65
I	2.5	2.6

Dim.	Min.	Max.
j	3	3.2
K	1.1	1.2
L	0.55	0.65
M	4.4	4.6
N	1.15	1.25
O	3.35	3.45
P	2.65	2.75
Q	3.15	3.25

Dimensions : Millimetres

## Part Number Table

Description	Part Number
Schottky Barrier Rectifier, 200V	MBRF20200C

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