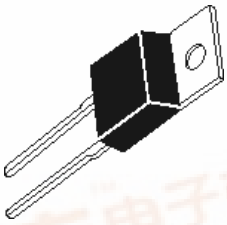
Semiconductor

Data Sheet

10 Amp SCHOTTKY BARRIER RECTIFIERS

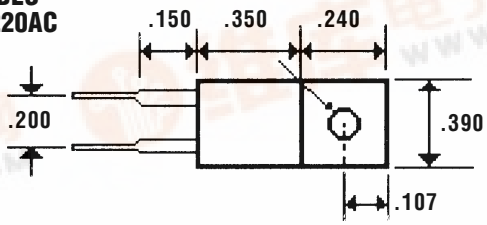
FBR1035 & 1045

Description



Mechanical Dimensions

JEDEC
TO-220AC



Features

- **HIGH CURRENT CAPABILITY WITH LOW V_F**
- **HIGH SURGE VOLTAGE AND TRANSIENT PROTECTION**
- **SUPERIOR METAL PROCESS**
- **MEETS UL SPECIFICATION 94V-0**

Electrical Characteristics @ 25°C.	***FBR1035 & 1045***		**Units**
Maximum Ratings	**FBR1035**	**FBR1045**	
Peak Repetitive Reverse Voltage...V_{RRM}	35	45	Volts
Working Peak Reverse Voltage...V_{RWM}	35	45	Volts
DC Blocking Voltage...V_{DC}	35	45	Volts
RMS Reverse Voltage...$V_{R(rms)}$	24	31	Volts
Average Forward Rectified Current...$I_{F(av)}$ T_C = 110°C	10		Amps
Repetitive Peak Forward Surge Current...I_{FM}	20		Amps
Non-Repetitive Peak Forward Surge Current...I_{FSM} @ Rated Load Conditions, ½ Wave, 60HZ, Single Phase	150		Amps
Forward Voltage...V_F			
@ I_F = 20 Amps, 25°C	.84		Volts
@ I_F = 20 Amps, 125°C	.72		Volts
@ I_F = 10 Amps, 125°C	.57		Volts
DC Reverse Current...I_R			
@ Rated DC Blocking Voltage T_L = 25°C	.1		mAmps
T_L =125°C	15		mAmps
Operating Temperature Range...T_J	-65 to 150		°C
Storage Temperature Range...T_{STRG}	-65 to 175		°C

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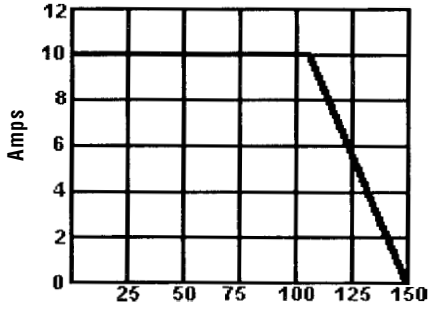
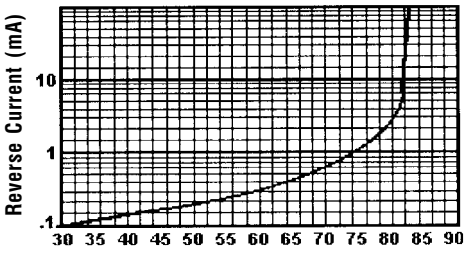
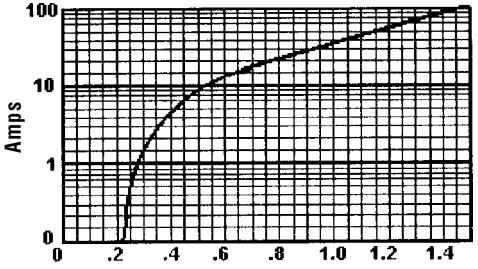
Forward Current Derating Curve



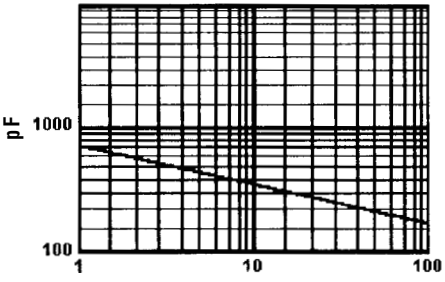
Typical Reverse Characteristics



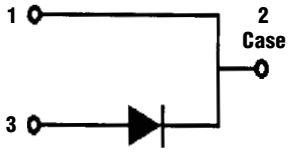
Typical Forward Characteristics



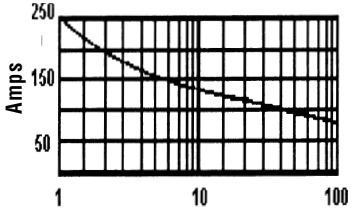
Typical Junction Capacitance



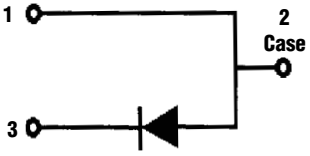
Case Positive, No Suffix Required



Typical Forward Characteristics



Case Negative, Use Suffix "R"



Ratings at 25 Deg. C ambient temperature unless otherwise specified.

Single Phase Half Wave, 60 HZ Resistive or Inductive Load.

For Capacitive Load, Derate Current by 20%.

NOTES: 1. Measured @ 1 MHZ and applied reverse voltage of 4.0V.
2. Thermal Resistance Junction to Case, Jedec Method.
3. When Mounted to heat sink, from body.