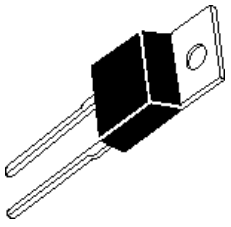
Data Sheet

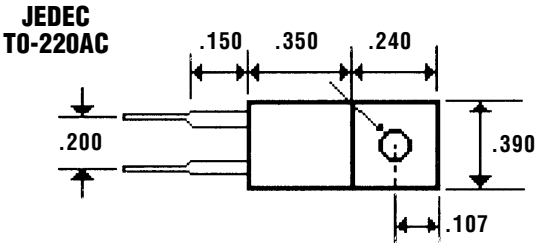
16 Amp SCHOTTKY BARRIER RECTIFIERS

FBR1650 & 1660

Description



Mechanical Dimensions



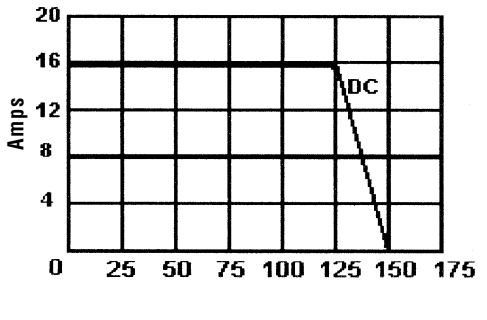
Features

- **HIGH CURRENT CAPABILITY WITH LOW V_F**
- **HIGH EFFICIENCY w/LOW POWER LOSS**
- **HIGH SURGE VOLTAGE AND TRANSIENT PROTECTION**
- **MEETS UL SPECIFICATION 94V-0**

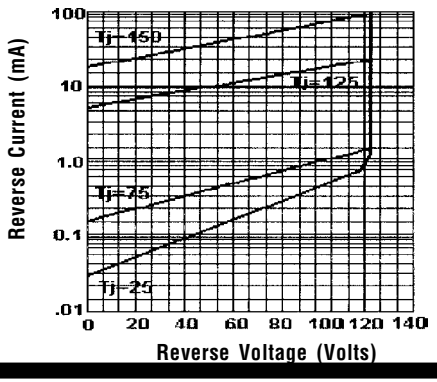
Electrical Characteristics @ 25°C.	***FBR1650 & 1660***		**Units**
Maximum Ratings	**FBR1650**	**FBR1660**	
Peak Repetitive Reverse Voltage...V_{RRM}	50	60	Volts
Working Peak Reverse Voltage...V_{RWM}	50	60	Volts
DC Blocking Voltage...V_{DC}	50	60	Volts
Average Forward Rectified Current...$I_{F(av)}$ @ T_C = 125°C	16		Amps
Repetitive Peak Forward Surge Current...I_{FM} T_C = 125°C (Rated V_R, Square Wave, 20KHZ)	32		Amps
Non-Repetitive Peak Forward Surge Current...I_{FSM} @ Rated Load Conditions, 8.3mS, ½ Sine Wave, Jedec Method	150		Amps
Repetitive Peak Reverse Surge Current...I_{RSM} @ 2uS PW, F = 1.0 KHZ	0.5		Amps
Forward Voltage...V_F			
Per Leg @ I_F = 16 Amps, 25°C	.75		Volts
Per Leg, 300uS, 2% Duty Cycle @ I_F = 16 Amps, 125°C	.65		Volts
DC Reverse Current (@ $V_R = V_{RM}$)...I_R			
@ Rated DC Blocking Voltage T_C = 25°C	1.0		mAmps
T_C =125°C	50		mAmps
Thermal Resistance, Junction to Case...$R_{\theta JC}$	3.0		°C / W
Voltage Rate of Change (Rated V_R)	1000		V / µS
Operating Temperature Range...T_J	-65 to 150		°C
Storage Temperature Range...T_{STRG}	-55 to 150		°C

16 Amp SCHOTTKY BARRIER RECTIFIERS

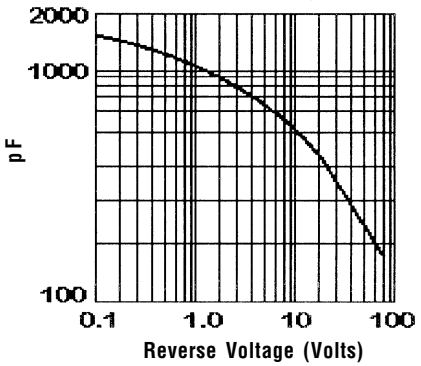
Forward Current Derating Curve



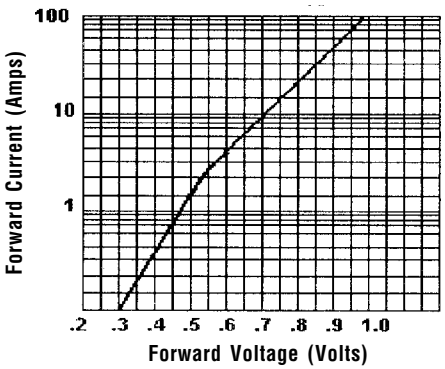
Typical Reverse Characteristics



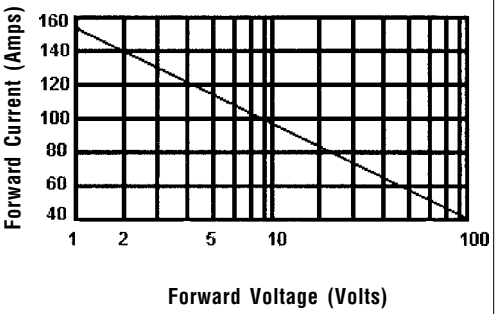
Typical Junction Capacitance



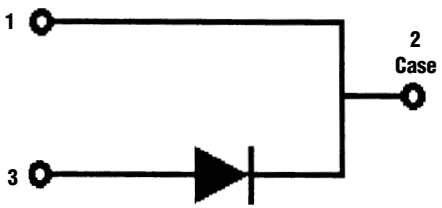
Forward Characteristics



Maximum Non-Repetitive Peak Forward Surge Current



Case Positive, No Suffix Required



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.