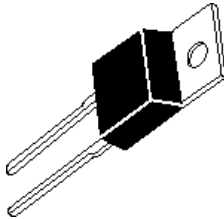
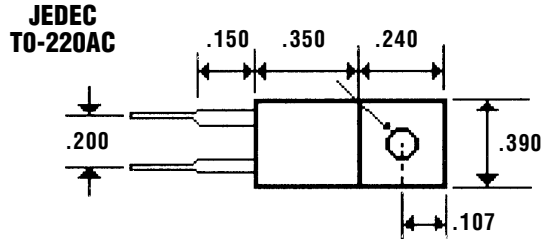


FBR1635 & 1645

Description



Mechanical Dimensions



Features

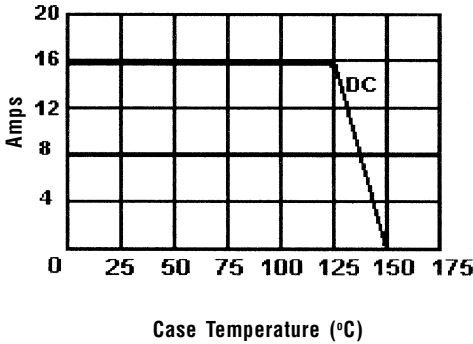
- HIGH CURRENT CAPABILITY WITH LOW V_F
- HIGH SURGE VOLTAGE AND TRANSIENT PROTECTION
- HIGH EFFICIENCY w/LOW POWER LOSS
- MEETS UL SPECIFICATION 94V-0

Electrical Characteristics @ 25°C.	FBR1635 & 1645		Units
Maximum Ratings	FBR1635	FBR1645	
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
Average Forward Rectified Current... $I_{F(av)}$ @ $T_C = 125^\circ\text{C}$	16		Amps
Repetitive Peak Forward Surge Current... I_{FM} $T_C = 125^\circ\text{C}$ (Rated V_R , Square Wave, 20KHZ)	32		Amps
Non-Repetitive Peak Forward Surge Current... I_{FSM} @ Rated Load Conditions, 8.3ms, 1/2 Sine Wave, Jedec Method	150		Amps
Repetitive Peak Reverse Surge Current... I_{RSM} @ 2uS PW, F = 1.0 KHZ	1.0		Amps
Forward Voltage... V_F 300uS, 2% Duty Cycle @ $I_F = 16$ Amps, 25°C	.63		Volts
300uS, 2% Duty Cycle @ $I_F = 16$ Amps, 125°C	.57		Volts
DC Reverse Current (@ $V_R = V_{RM}$)... I_R @ Rated DC Blocking Voltage	0.2		mAmps
$T_C = 25^\circ\text{C}$	40		mAmps
$T_C = 125^\circ\text{C}$			
Thermal Resistance, Junction to Case... $R_{\theta JC}$	1.5		°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}	-65 to 175		°C

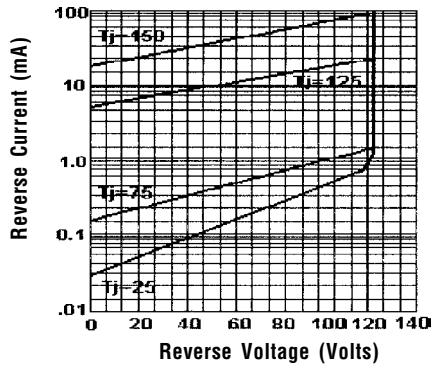
16 Amp SCHOTTKY BARRIER RECTIFIERS

FBR1635 & 1645

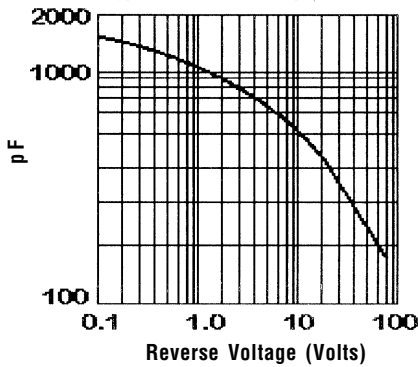
Forward Current Derating Curve



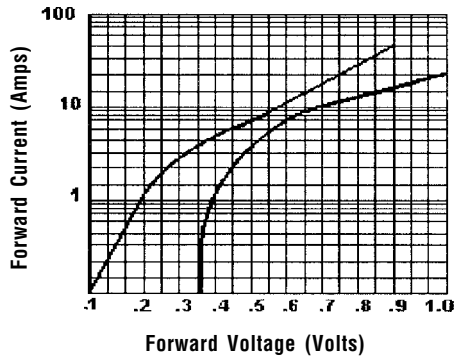
Typical Reverse Characteristics



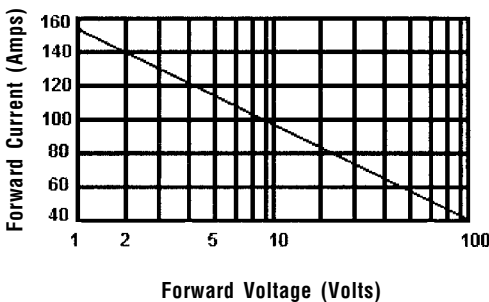
Typical Junction Capacitance



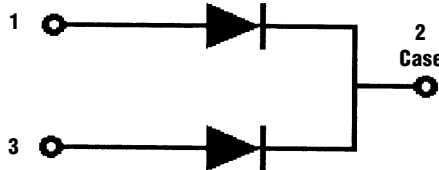
Forward Characteristics



**Maximum Non-Repetitive
Peak Forward Surge Current**



**Common Cathode,
Suffix "C"**



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.