

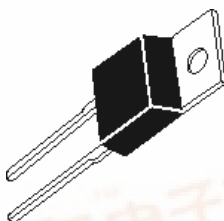


Data Sheet

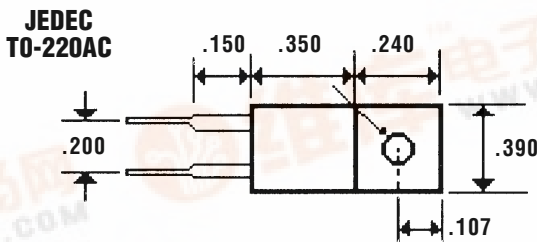
16 Amp SCHOTTKY BARRIER RECTIFIERS

FBR1650 & 1660

Description



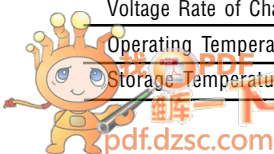
Mechanical Dimensions



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.		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... $I_{F(av)}$ @ $T_C = 125^\circ\text{C}$		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		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	$T_C = 25^\circ\text{C}$	1.0		mAmps
	$T_C = 125^\circ\text{C}$	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

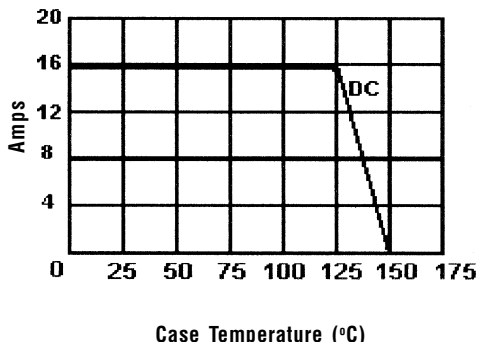




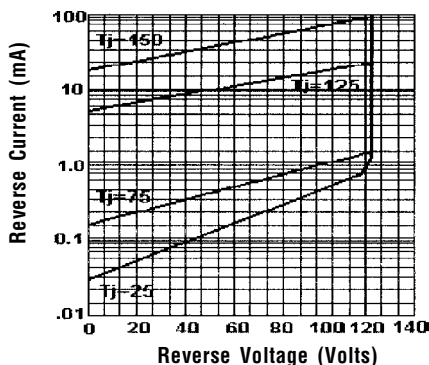
16 Amp SCHOTTKY BARRIER RECTIFIERS

FBR1650 & 1660

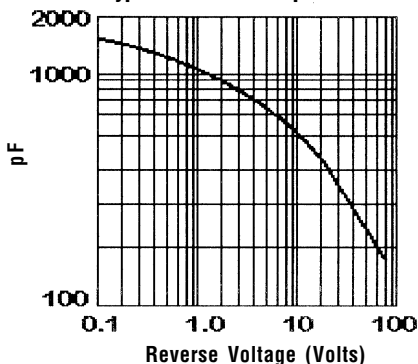
Forward Current Derating Curve



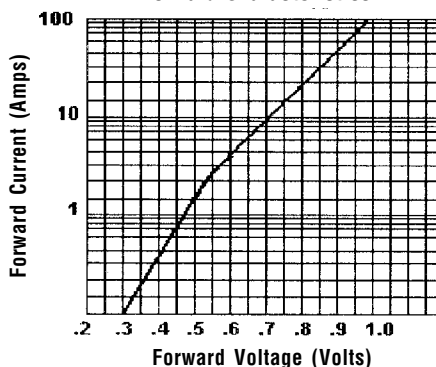
Typical Reverse Characteristics



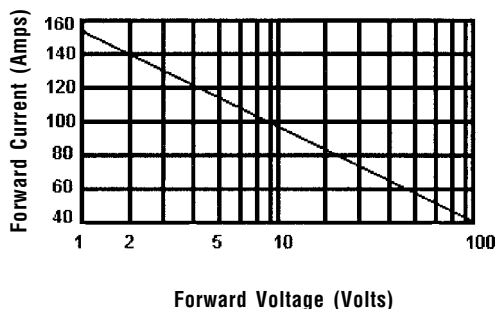
Typical Junction Capacitance



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.