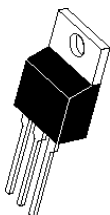
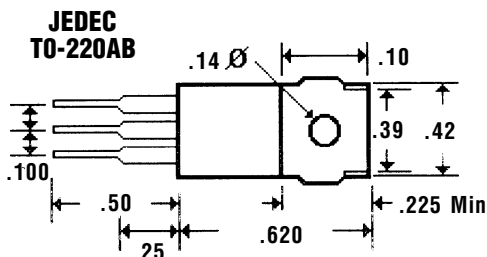


## Description



## Mechanical Dimensions

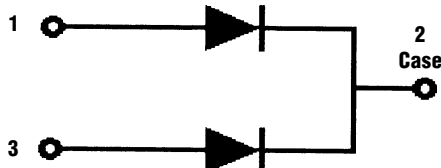


## Features

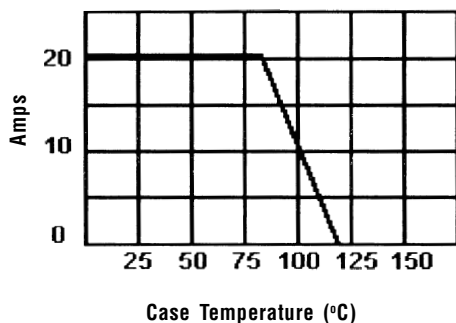
- **HIGH CURRENT CAPABILITY WITH LOW  $V_F$**
- **HIGH SURGE VOLTAGE AND TRANSIENT PROTECTION**
- **HIGH EFFICIENCY w/LOW POWER LOSS**
- **MEETS UL SPECIFICATION 94V-0**

<b>Electrical Characteristics @ 25°C.</b>	<b>FBR2090 . . . 20100 Series</b>		<b>Units</b>
<b>Maximum Ratings</b>	<b>FBR2090</b>	<b>FBR20100</b>	
Peak Repetitive Reverse Voltage... $V_{RRM}$ Pulse Test 0.5 mS, Duty Cycle 1/40	90	100	Volts
Working Peak Reverse Voltage... $V_{RWM}$	90	100	Volts
DC Blocking Voltage... $V_{DC}$	90	100	Volts
Average Forward Rectified Current... $I_o$ $T_c = 110^\circ\text{C}$	20		Amps
Non-Repetitive Peak Forward Surge Current... $I_{FSM}$ @ Rated Load Conditions, Sinusoidal Wave, 60HZ, 1 Cycle, $T_j = 125^\circ\text{C}$	120		Amps
Forward Voltage... $V_F$ @ $I_F = 10$ Amps	.85		Volts
@ $I_F = 20$ Amps	.95		Volts
DC Reverse Current (@ $V_R = V_{RM}$ )... $I_R$ @ Rated DC Blocking Voltage	.15		mAmps
Thermal Resistance, Junction to Case... $R_{\theta JC}$	1.5		$^\circ\text{C} / \text{W}$
Operating Temperature Range... $T_j$	-40 to 125		$^\circ\text{C}$
Storage Temperature Range... $T_{STRG}$	+ 125		$^\circ\text{C}$

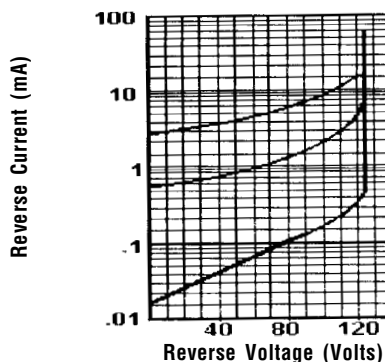
Common Cathode,  
Suffix "C"



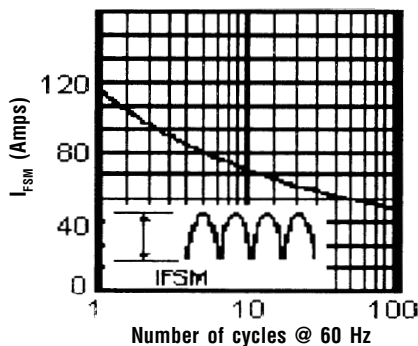
Forward Current Derating Curve



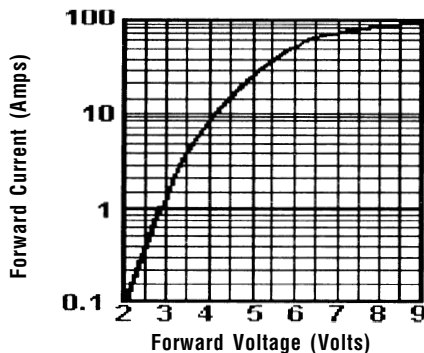
Typical Reverse Characteristics



Maximum Surge Capacity



Forward Characteristics



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.