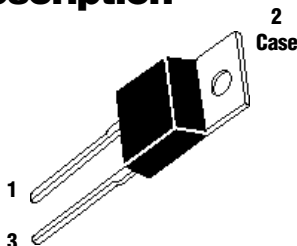
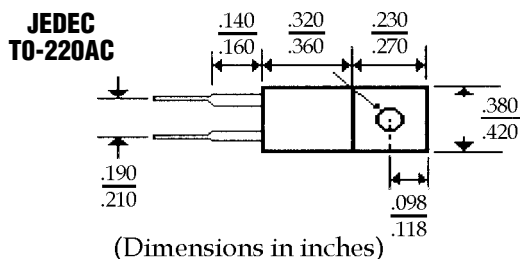


Description



Mechanical Dimensions

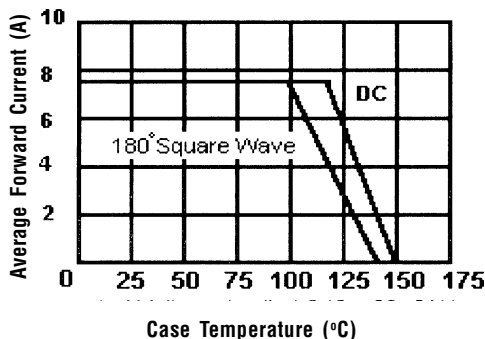


Features

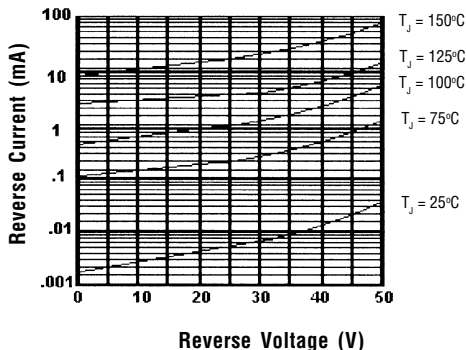
- **HIGH CURRENT CAPABILITY WITH LOW V_F**
- **HIGH SURGE VOLTAGE AND TRANSIENT PROTECTION**
- **HIGH EFFICIENCY w/LOW POWER LOSS**
- **MEETS UL SPECIFICATION 94V-0**

FBR830 . . . 845 Series					Units
Maximum Ratings	FBR830	FBR835	FBR840	FBR845	
Peak Repetitive Reverse Voltage... V_{RRM}	30	35	40	45	Volts
RMS Reverse Voltage... V_{RWM}	30	35	40	45	Volts
DC Blocking Voltage... V_{DC}	30	35	40	45	Volts
Average Forward Rectified Current... I_o $T_c = 105^\circ\text{C}$	8.0	.....	.....	Amps
Repetitive Peak Forward Surge Current... I_{FM}	16	.....	.....	Amps
Non-Repetitive Peak Forward Surge Current... I_{FSM} @ Rated Current & Temp	120	.....	.....	Amps
Repetitive Peak Reverse Surge Current... I_{RSM} Sinosoidal Wave, 60Hz, 1 Cycle, $T_j = 125^\circ\text{C}$	1.0	.....	.....	Amps
Operating Temperature Range... T_j	-65 to 150	.....	.....	$^\circ\text{C}$
Storage Temperature Range... T_{STRG}	-65 to 175	.....	.....	$^\circ\text{C}$
Electrical Characteristics					
Maximum Forward Voltage... V_F @ $I_F = 8.0$ Amps, $T_c = 125^\circ\text{C}$57	.....	.....	Volts
@ $I_F = 15$ Amps, $T_c = 125^\circ\text{C}$72	.....	.....	Volts
@ $I_F = 15$ Amps, $T_c = 25^\circ\text{C}$84	.....	.....	Volts
Maximum DC Reverse Current... I_R @ Rated DC Blocking Voltage $T_L = 25^\circ\text{C}$	2.0	.....	.....	mAmps
$T_L = 125^\circ\text{C}$	15	.....	.....	mAmps
Maximum Thermal Resistance... $R_{\theta JC}$	3.0	.....	.....	$^\circ\text{C} / \text{W}$
Maximum Thermal Resistance... $R_{\theta JA}$	60	.....	.....	$^\circ\text{C} / \text{W}$

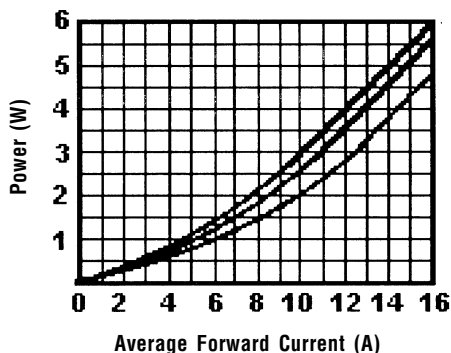
Forward Current Derating Curve



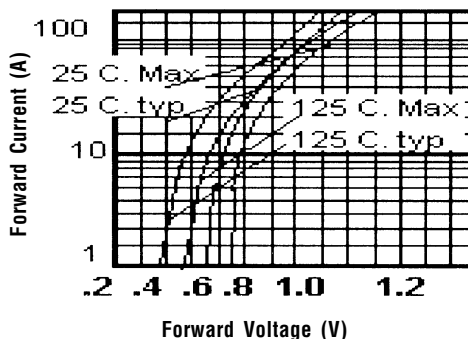
Typical Reverse Characteristics



Forward Power Dissipation



Typical Forward Characteristics

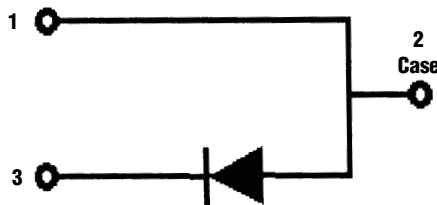


Electrical Description

Case Cathode, No Suffix Required



Case Anode, 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%.