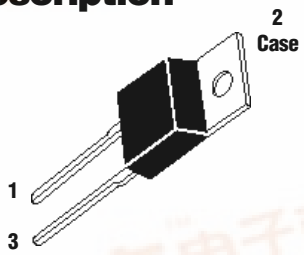
Semiconductor

Data Sheet

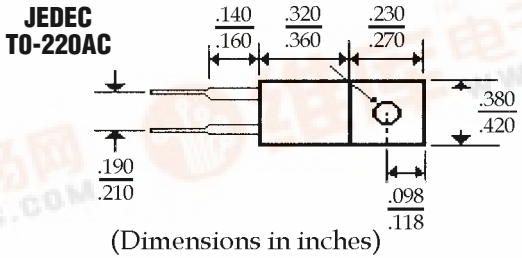
8.0 Amp SCHOTTKY BARRIER RECTIFIERS

FBR830...845 Series

Description



Mechanical Dimensions



(Dimensions in inches)

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**

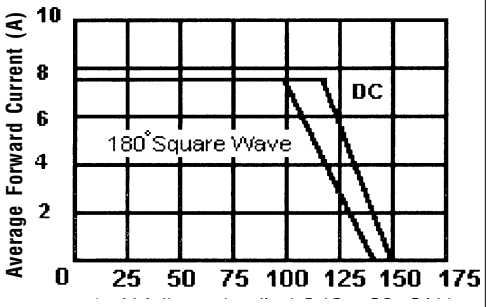
	FBR830 . . . 845 Series				Units
Maximum Ratings	**FBR830**	**FBR835**	**FBR840**	**FBR845**	
Peak Repetitive Reverse Voltage...V_{RRM}	30	35	40	45	Volts
RMS Reverse Voltage...V_{RWM}	30	35	40	45	Volts
DC Blocking Voltage...V_{DC}	30	35	40	45	Volts
Average Forward Rectified Current...I_o T_c = 105°C	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°C	1.0				Amps
Operating Temperature Range...T_J	-65 to 150				°C
Storage Temperature Range...T_{STRG}	-65 to 175				°C
Electrical Characteristics					
Maximum Forward Voltage...V_F					
@ I_F = 8.0 Amps, T_C = 125°C	.57				Volts
@ I_F = 15 Amps, T_C = 125°C	.72				Volts
@ I_F = 15 Amps, T_C = 25°C	.84				Volts
Maximum DC Reverse Current...I_R @ Rated DC Blocking Voltage T_L = 25°C	2.0				mAmps
@ Rated DC Blocking Voltage T_L =125°C	15				mAmps
Maximum Thermal Resistance...$R_{\theta JC}$	3.0				°C / W
Maximum Thermal Resistance...$R_{\theta JA}$	60				°C / W

Semiconductor *Data Sheet*

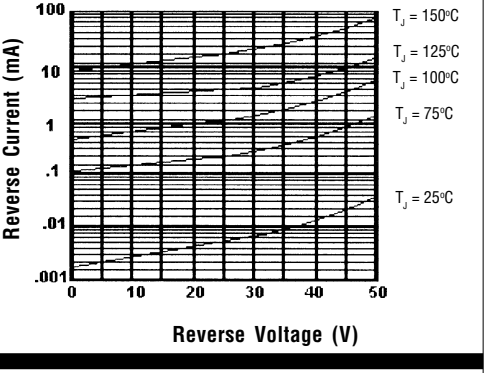
8.0 Amp SCHOTTKY BARRIER R ECTIFIERS

FBR830...845 Series

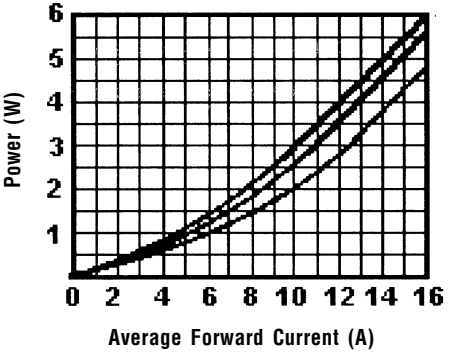
Forward Current Derating Curve



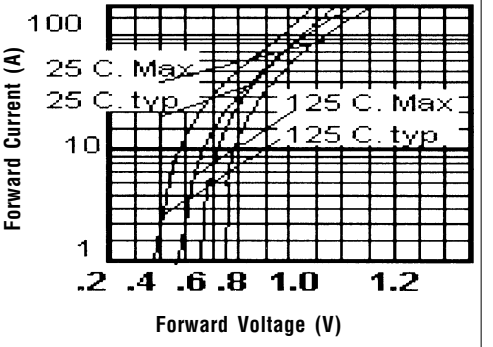
Typical Reverse Characteristics



Forward Power Dissipation

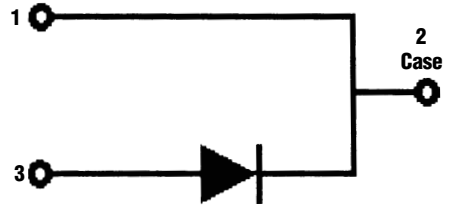


Typical Forward Characteristics

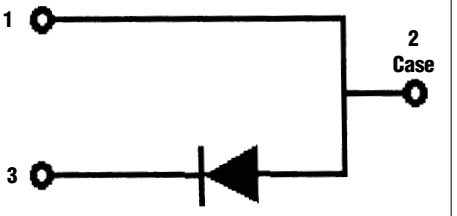


Electrical Description

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%.