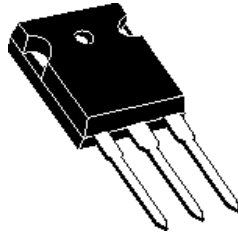


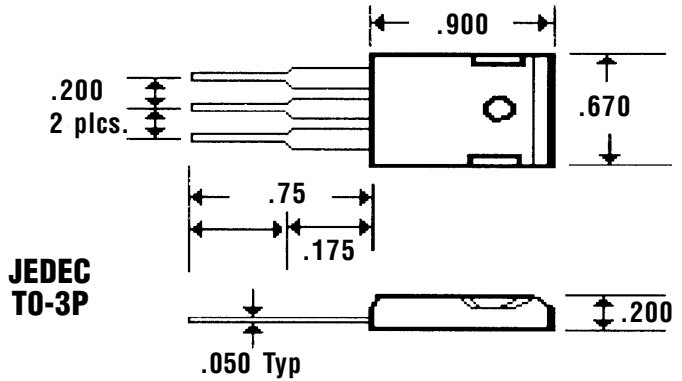
30 Amp 90 & 100V SCHOTTKY BARRIER RECTIFIERS

FBR3090 & 30100 Series

Description



Mechanical Dimensions



Features

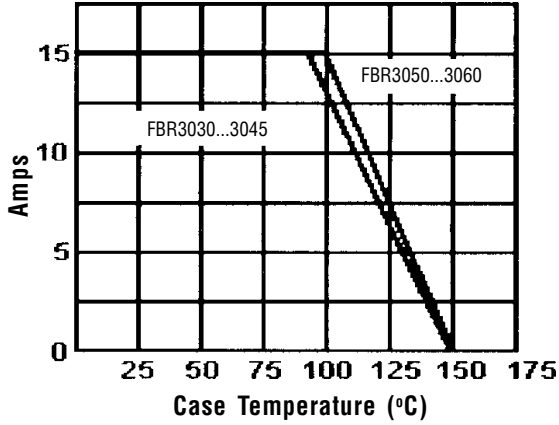
- HIGH CURRENT CAPABILITY WITH LOW V_F
- HIGH SURGE VOLTAGE AND TRANSIENT PROTECTION
- HIGH EFFICIENCY w/LOW POWER LOSS
- MEETS UL SPECIFICATION 94V-0

| Electrical Characteristics @ 25°C. | | FBR3090 & 30100 | | Units |
|--|---------------------------|-----------------|----------|------------------|
| Maximum Ratings | | FBR3090 | FBR30100 | |
| Peak Repetitive Reverse Voltage... V_{RRM} | | 90 | 100 | Volts |
| Working Peak Reverse Voltage... V_{RWM} | | 90 | 100 | Volts |
| DC Blocking Voltage... V_{DC} | | 90 | 100 | Volts |
| RMS Reverse Voltage... V_R (rms) | | 21 | 42 | Volts |
| Average Forward Rectified Current... I_O @ $T_C = 110^\circ\text{C}$ V_R (equiv.) $< = 0.2V_{R(DC)}$ | | 30 | | Amps |
| Non-Repetitive Peak Forward Surge Current... I_{FSM} @ Rated Load Conditions, 1/2 Sine Wave, Single Phase, 60HZ | | 300 | | Amps |
| Forward Voltage... V_F @ $I_F = 15$ Amps | | .55 | | Volts |
| DC Reverse Current... I_R @ Rated DC Blocking Voltage | $T_C = 25^\circ\text{C}$ | 10 | | mAmps |
| | $T_C = 150^\circ\text{C}$ | 100 | | mAmps |
| Operating Temperature Range... T_J | | -65 to 150 | | $^\circ\text{C}$ |

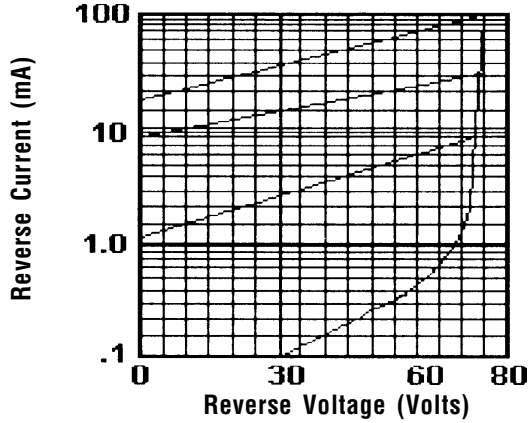
30 Amp 90 & 100V SCHOTTKY BARRIER RECTIFIERS

FBR3090 & 3100

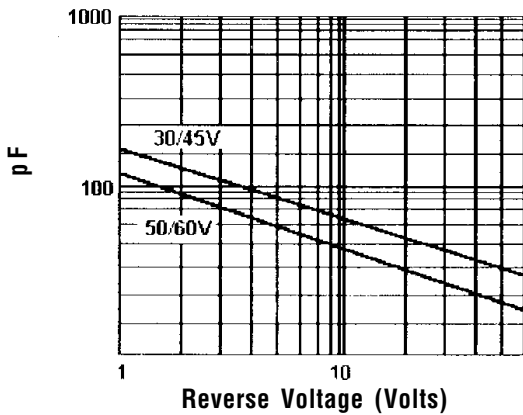
Forward Current Derating Curve



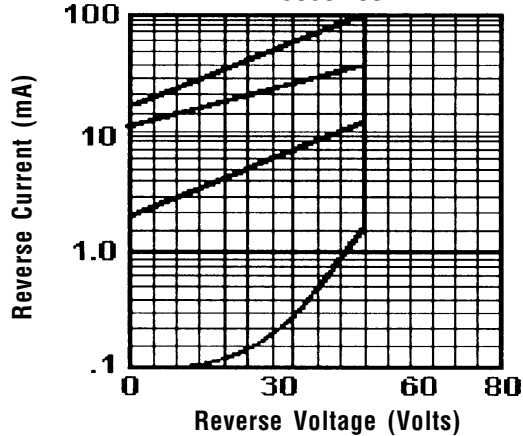
Typical Reverse Characteristics FBR3030..45



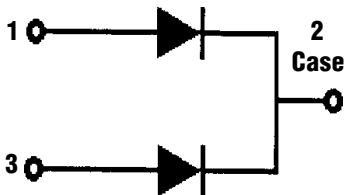
Typical Junction Capacitance



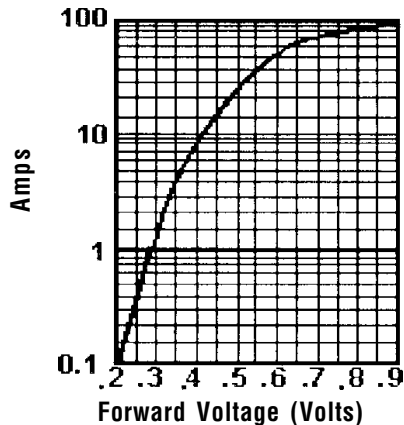
Typical Reverse Characteristics FBR3050..60



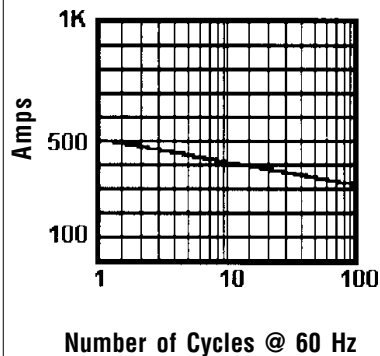
Common Cathode, Suffix "C"



Typical Forward Characteristics



Peak Forward Surge Current



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.