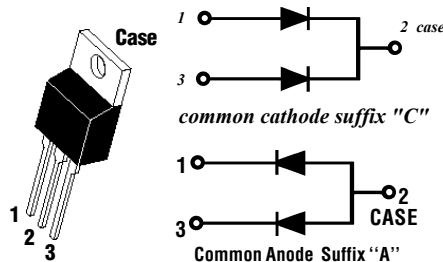


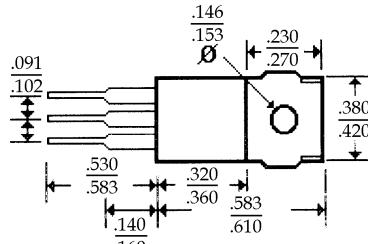
10 Amp High Voltage SCHOTTKY BARRIER RECTIFIERS

FBR10200

Description



Mechanical Dimensions



TO-220AB

Dimension in mm

| Feature | Mechanical Data |
|---|--------------------------------------|
| ■ Low Forward Voltage Drop | ■ Case: ITO-220AB Molded Plastic |
| ■ High Current Capability | ■ Epoxy: UL94-V Rate Flame Retardant |
| ■ High Reliability | ■ Terminals: Lead Solderable per |
| ■ High Surge Current Current capability | MIL-STD-202 Method 208 Guaranteed |
| ■ Outline Free Pb | ■ Weight: 1.9 grams(approx.) |

Max Ratings at Ta=25C Unless Otherwise Specified

| Characteristic | Symbol | FBR10200 | Unit |
|--|---------|-----------|------|
| Peak Repetitive Reverse Voltage | Vrrm | 200 | V |
| working Peak Reverse Voltage | Vrwm | 200 | V |
| DC Blocking Voltage | Vdc | 200 | V |
| RMS Reverse Voltage | Vr(rms) | 140 | V |
| Forward Continuous Current ; per leg/ package | IF(AV) | 5/10 | A |
| non-Repetitive peak Surge Current Halfwave single phase, 60Hz | IFSM | 150 | A |
| Max Forward Voltage IF=5A/10A @25C | Vf | 0.88/0.75 | V |
| Max Forward Voltage IF=5A/10A @125C | | 0.97/0.85 | |
| Reverse Leakage Current; note. 1@ 25C/125C | Ir | 0.005/1.0 | mA |
| Operating & storage Temp. Range | Tj/Ts | -65~+175 | C |
| Thermal Resistance Junction to Case | Rthjc | 4.0 | C/W |
| Typical Diode Capacitance Vr=-5V, f=1.0MHz | Cd | 250 | pF |

Note: 2. Pulse width<=300us, duty cycle<=1%

Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)

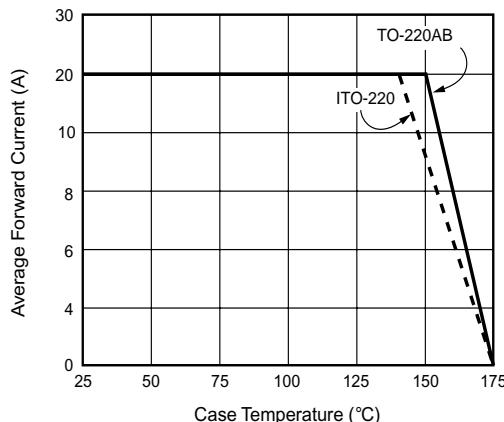


Figure 1. Forward Derating Curve (Total)

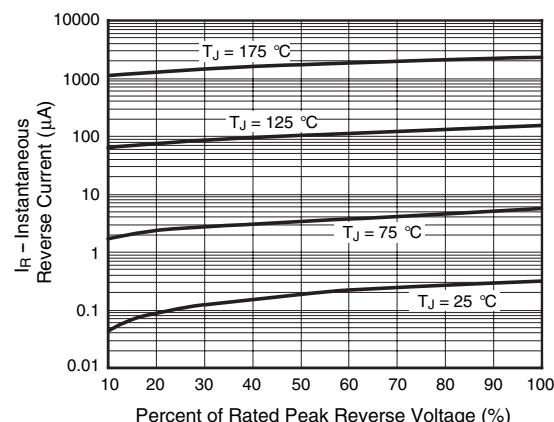


Figure 4. Typical Reverse Characteristics Per Leg

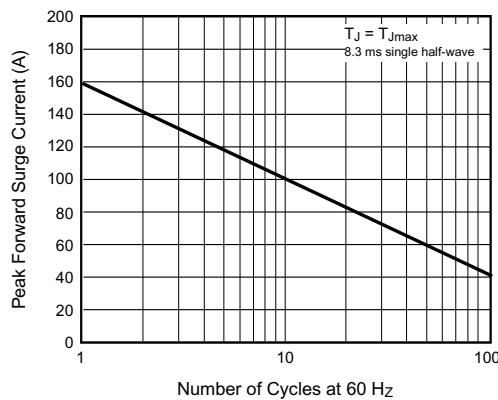


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

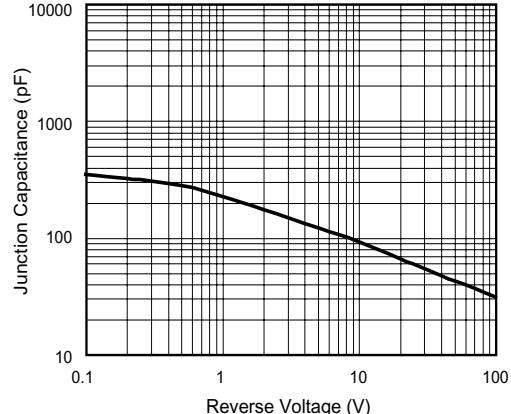


Figure 5. Typical Junction Capacitance Per Leg

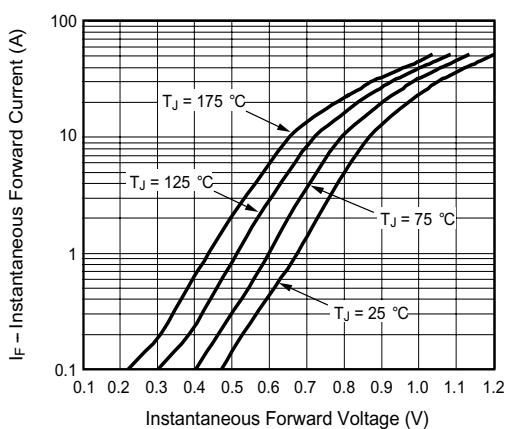


Figure 3. Typical Instantaneous Forward Characteristics Per Leg

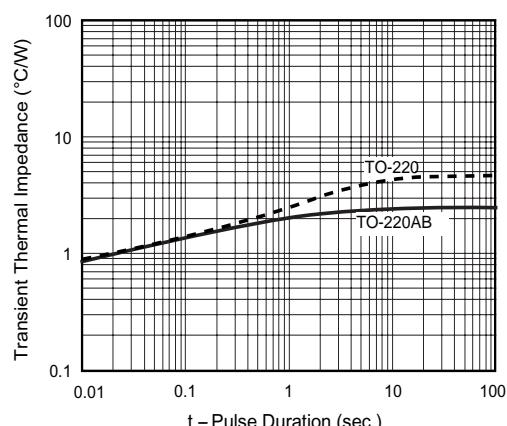


Figure 6. Typical Transient Thermal Impedance Per Leg

For FCI Application