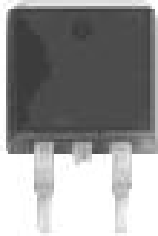




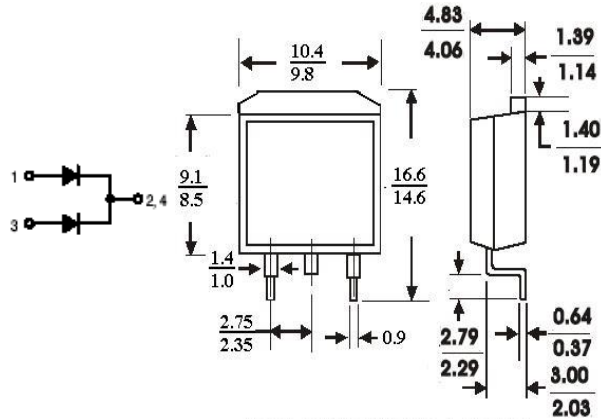
16 Amps Dual die Surface Mount Schottky Barrier Power Rectifier

Description

FBRD1620...16100



Mechanical Dimensions



TO-263

Dimension in mm

Feature

- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Current capability
- Outline Free Pb

Mechanical Data

- Case: TO-263 Molded Plastic
- Epoxy: UL94-V Rate Flame Retardant
- Terminals: Lead Solderable per MIL-STD-202 Method 208 Guaranteed
- Weight: 1.7 grams (approx.)

Max Ratings at Ta=25C Unless Otherwise Specified

| Characteristic | Symbol | FBRD1620 | FBRD1640 | FBRD1650 | FBRD1660 | FBRD1680 | FBRD16100 | Unit |
|---|--------------------------------|----------|----------|----------|----------|----------|-----------|------|
| Peak Repetitive Reverse Voltage | V _{rrm} | 20 | 40 | 50 | 60 | 80 | 100 | V |
| working Peak Reverse Voltage | V _{rwm} | 20 | 40 | 50 | 60 | 80 | 100 | V |
| DC Blocking Voltage | V _{dc} | 20 | 40 | 50 | 60 | 80 | 100 | V |
| RMS Reverse Voltage | V _{r(rms)} | 14 | 28 | 35 | 42 | 56 | 70 | V |
| Forward Continuous Current ; per leg/ package | I _{F(AV)} | 16 | | | | | | A |
| non-Repetitive peak Surge Current Halfwave single phase, 60Hz | I _{FSM} | 150 | | | | | | A |
| Max Forward Voltage I _F =8A @25C | V _f | 0.55 | | 0.75 | | 0.85 | | V |
| Reverse Leakage Current; note. 1@ 25C/100C | I _r | 0.5/100 | | | | | | mA |
| Operating & storage Temp. Range | T _j /T _s | -65~+150 | | | | | | C |
| Thermal Resistance Junction to Case | R _{thjc} | 2.0 | | | | | | C/W |
| Typical Diode Capacitance V _r =-5V, f=1.0MHz | C _d | 700 | | | | | | pF |

Note: 1. Measured at 1.0MHz and applied reverse voltage at 4.0V DC



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RATING AND CHARACTERISTIC CURVES

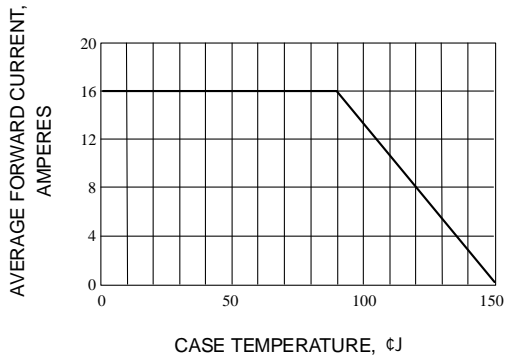


Fig. 1-FORWARD CURRENT DERATING CURVE

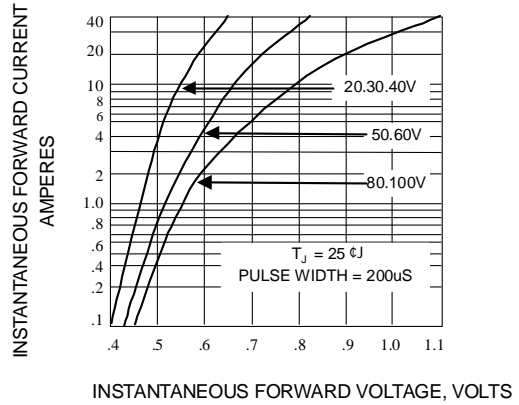


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

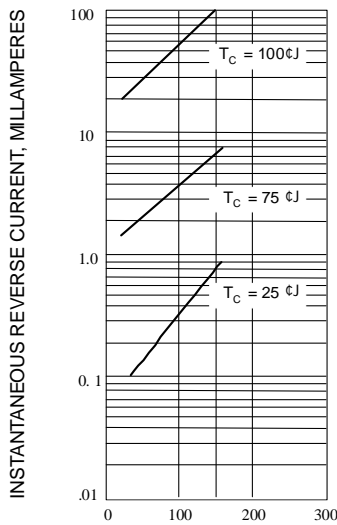


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

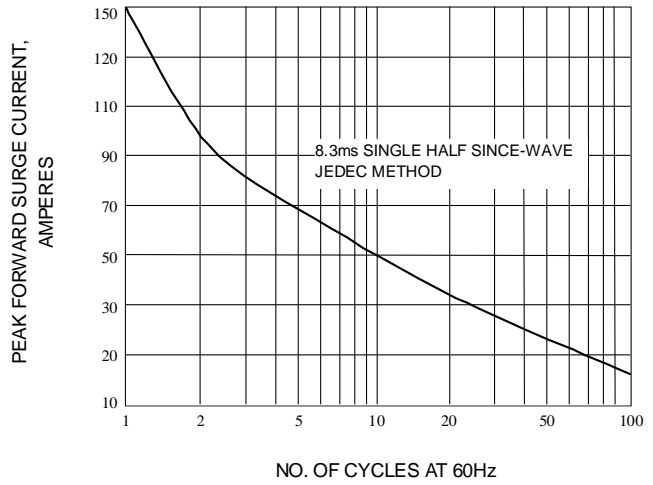


Fig. 4-MAXIMUM NON-REPETITIVE SURGE CURRENT

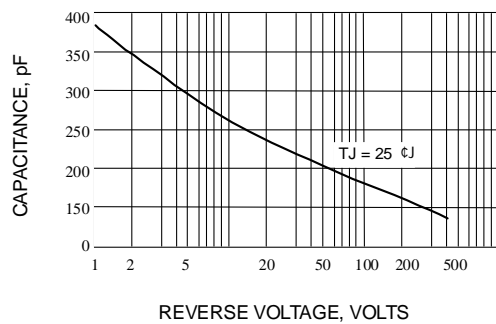


Fig. 5-TYPICAL JUNCTION CAPACITANCE