



1.5 AMP SOFT RECOVERY FAST SWITCHING BRIDGE RECTIFIERS

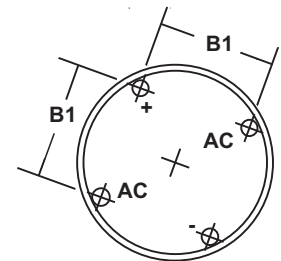
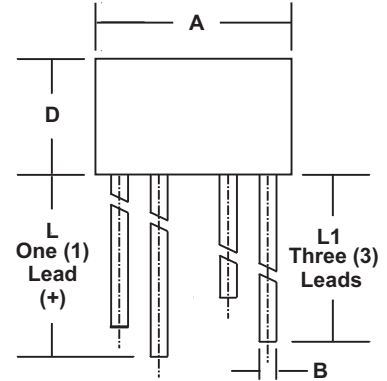
FEATURES

- TRUE SOFT RECOVERY CHARACTERISTIC WITH NO RINGING, SPIKES, or OVERSHOOT
- HIGH FREQUENCY: 250 kHz
FAST RECOVERY: 100nS - 150nS
- UNMATCHED PERFORMANCE - Minimal RF/EMI
Reduced Power Losses, Extremely Cool Operation
Increased Power Supply Efficiency
- VOID FREE Vacuum Die Soldering For Maximum Mechanical Strength And Heat Dissipation
(Solder Voids: Typical < 2%, Max. < 10% of Die Area)
- Proprietary Junction Passivation For Superior Reliability and Performance
- Wide Range of Applications: Motor Speed Controllers, Inverters, Converters, Choppers, Power Supplies, etc.
- **UL RECOGNIZED - FILE #E141956**
- **RoHS COMPLIANT**

MECHANICAL DATA

- Case: Molded Epoxy, U/L Flammability Rating 94V-0
- Terminals: Round silver plated pins
- Soldering: Per MIL-STD 202 Method 208 guaranteed
- Polarity: Marked on case
- Mounting Position: Any
- Weight: 0.04 Ounces (1.1 Grams)

MECHANICAL SPECIFICATION



| SYM | MILLIMETERS | | INCHES | |
|-----|-------------|------|--------|-------|
| | MIN | MAX | MIN | MAX |
| A | 8.6 | 8.89 | 0.340 | 0.350 |
| B | 0.76 | 0.81 | 0.030 | 0.032 |
| B1 | 4.6 | 5.6 | 0.180 | 0.220 |
| D | 5.1 | 5.6 | 0.200 | 0.220 |
| L | 30.5 | n/a | 1.20 | n/a |
| L1 | 25.4 | n/a | 1.0 | n/a |

MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive loads, derate current by 20%.

| PARAMETER (TEST CONDITIONS) | SYMBOL | RATINGS | | | | | | UNITS |
|--|----------|-------------|-----------|-----------|-----------|-----------|-----------|----------|
| | | FWB 150-S | FWB 151-S | FWB 152-S | FWB 154-S | FWB 156-S | FWB 158-S | |
| Series Number | | | | | | | | |
| Maximum DC Blocking Voltage | VRM | 50 | 100 | 200 | 400 | 600 | 800 | VOLTS |
| Maximum RMS Voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | |
| Maximum Peak Recurrent Reverse Voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | |
| Average Forward Rectified Current @ TA = 25 °C | IO | 1.5 | | | | | | AMPS |
| Peak Forward Surge Current. Single Half-Sine Wave Superimposed on Rated Load (JEDEC Method). TJ = 125 °C | IFSM | 50 | | | | | | |
| Maximum Forward Voltage (Per Diode) at 1 Amp DC | VFM | 1.25 | | | | | | VOLTS |
| Maximum Average DC Reverse Current At Rated DC Blocking Voltage) @ TA = 25 °C @ TA = 125 °C | IRM | 1.2 0.10 | | | | | | μA mA |
| Maximum Reverse Recovery Time | TRR | 150 | | | | | | nS |
| Typical Thermal Resistance, Junction to Case | RθJL | 15 | | | | | | °C/W |
| Junction Operating and Storage Temperature Range | TJ, TSTG | -55 to +175 | | | | | | °C |