

1.5 AMP FAST RECOVERY BRIDGE RECTIFIERS

FEATURES

- PRV Ratings from 50 to 1000 Volts
- Surge overload rating to 45 Amps peak
- Reliable low cost molded plastic construction
- Ideal for printed circuit board applications
- Fast switching for high efficiency

• **UL RECOGNIZED - FILE #E141956**

• **RoHS COMPLIANT**

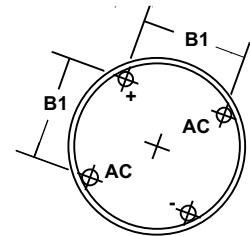
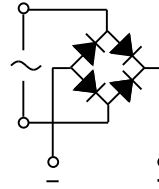
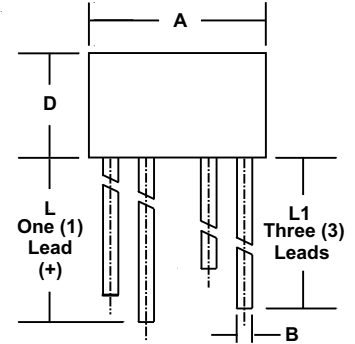
MECHANICAL DATA

- 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: 0.05 Ounces (1.3 Grams)

MECHANICAL SPECIFICATION

ACTUAL SIZE OF
WB PACKAGE

SERIES FWB150 - FWB1510



| 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 | 27.94 | n/a | 1.10 | 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 | FWB 151 | FWB 152 | FWB 154 | FWB 156 | FWB 158 | FWB 1510 | |
| Series Number | | | | | | | | | |
| Maximum DC Blocking Voltage | V _{RM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | VOLTS |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | |
| Maximum Peak Recurrent Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | |
| Average Forward Rectified Current @ T _c = 55 °C | I _O | 1.5 | | | | | | | AMPS |
| Peak Forward Surge Current (8.3mS single half sine wave superimposed on rated load) | I _{FSM} | 45 | | | | | | | |
| Maximum Forward Voltage (Per Diode) at 1 Amp DC | V _{FM} | 1.3 | | | | | | | VOLTS |
| Maximum Average DC Reverse Current at Rated DC Blocking Voltage (Per Bridge Element) @ T _A = 25 °C @ T _A = 100 °C | I _{RM} | 10 1 | | | | | | | μA mA |
| Maximum Reverse Recovery Time (Note 1) | T _{RR} | 200 | | 300 | | 500 | | nS | |
| Thermal Energy (Rating for Fusing, t < 8.3 mS) | I ² t | 6.6 | | | | | | | AMPS ² SEC |
| Typical Thermal Resistance, Junction to Ambient (Note 2) | R _{θJA} | 40 | | | | | | | °C/W |
| Junction Operating and Storage Temperature Range | T _J , T _{STG} | -55 to +150 | | | | | | | °C |

NOTES: (1) T_J=25°C, I_F=0.5A, I_R=1A, I_{RR}=0.25A
(2) Mounted on PC Board with 0.2" sq. (5.1mm sq.) copper pads and lead length of 0.375" (9.5mm)