

1.5 AMP SILICON BRIDGE RECTIFIERS

FEATURES

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

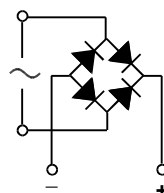
- **UL RECOGNIZED - FILE #E141956**

MECHANICAL DATA

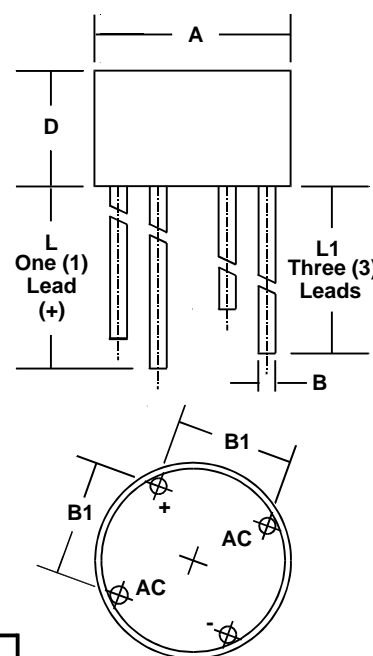
- Case: Molded plastic, U/L Flammability Rating 94V-0
- Terminals: Round silver plated pins
- Soldering: Per MIL-STD 202 Method 208 guaranteed
- Polarity: Marked on case
- Mounting Position: Any
- Weight: 0.05 Ounces (1.3 Grams)

MECHANICAL SPECIFICATION

ACTUAL SIZE OF WB PACKAGE



SERIES WB150 - WB1510



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

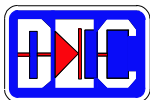
MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

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
Series Number		WB 150	WB 151	WB 152	WB 154	WB 156	WB 158	WB 1510		
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 _A = 25° C	I _o	1.5								AMPS
Peak Forward Surge Current. Single 60Hz Half-Sine Wave Superimposed on Rated Load (JEDEC Method). T _J = 125° C	I _{FSM}	50								
Maximum Forward Voltage (Per Diode) at 1 Amp DC	V _{FM}	1.0								VOLTS
Maximum Average DC Reverse Current At Rated DC Blocking Voltage @ T _A = 25° C	I _{RM}	10 (Typical < 0.1μA)								μA
Typical Thermal Resistance Junction to Ambient (Note 1) Junction to Lead (Note 1)	R _{θJA} R _{θJL}	35 15								°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-40 to +125 (Junction), -40 to +150 (Storage)								°C

NOTES: (1) Bridge mounted on PC Board with 0.2" sq. (5.5 mm sq.) copper pads and lead length of 0.375" (9.5 mm).

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RATING & CHARACTERISTIC CURVES FOR SERIES WB150 - WB1510

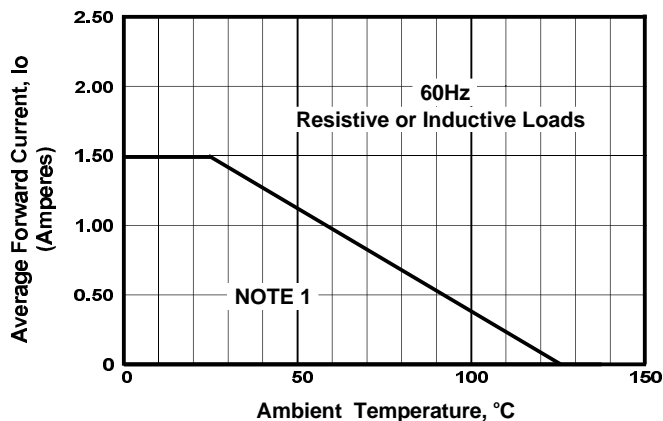


FIGURE 1. FORWARD CURRENT DERATING CURVE

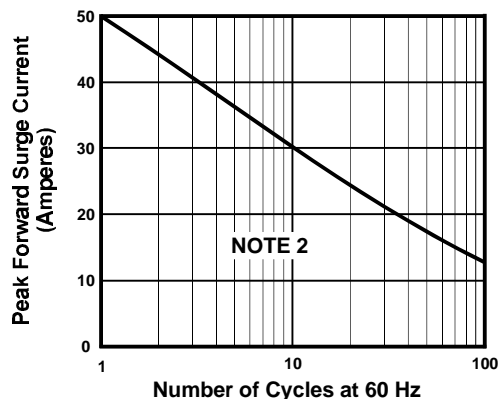


FIGURE 2. MAXIMUM NON-REPETITIVE SURGE CURRENT

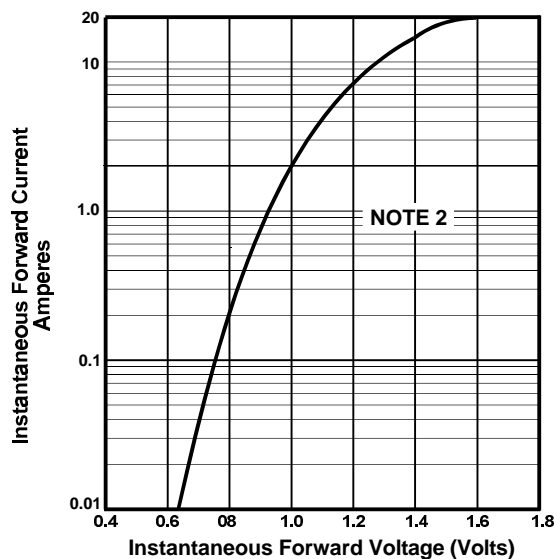


FIGURE 3. TYPICAL FORWARD CHARACTERISTIC PER DIODE

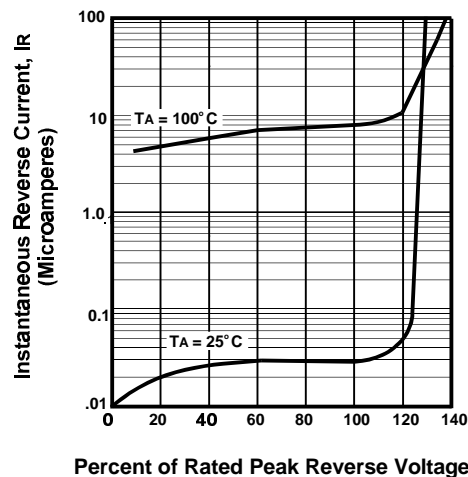


FIGURE 4. TYPICAL REVERSE CHARACTERISTICS

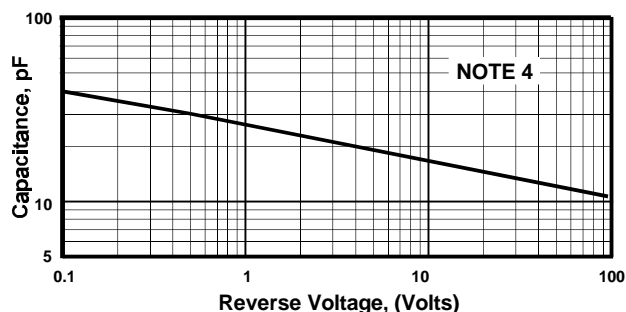


FIGURE 5. TYPICAL JUNCTION CAPACITANCE PER DIODE

NOTES

- (1) Bridge Mounted on PC Board With 0.2" Sq. (5.5mm Sq.) Copper Pads And Bridge Lead Length of 0.375" (9.5mm)
- (2) $T_J = 125^\circ\text{C}$
- (3) $T_J = 25^\circ\text{C}$; Pulse Width = 300 μSec , 1% Duty Cycle
- (4) $T_J = 25^\circ\text{C}$; $f = 1\text{ MHz}$; $V_{\text{sig}} = 50\text{mVp-p}$