

Glass Passivated Single-Phase Bridge Rectifier

Rectifier Reverse Voltage 50 and 1000 V

Rectifier Forward Current 2.0 A

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- This series is UL listed under the Recognized Component Index, file number E54214
- Glass passivated chip junction
- High case dielectric strength
- Typical I_R less than $0.5\mu A$
- High surge current capability
- Ideal for printed circuit boards
- High temperature soldering guaranteed:
260°C/10 seconds, 0.375 (9.5mm) lead length, 5lbs. (2.3kg) tension

Mechanical Data

Case: Molded plastic body over passivated junctions

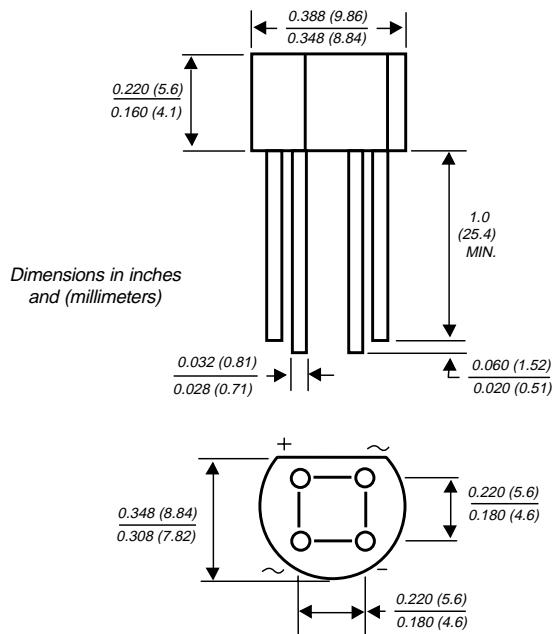
Terminals: Plated leads solderable per MIL-STD-750, Method 2026

Mounting Position: Any

Weight: 0.04 ounce, 1.1 grams



Case Style WOG



Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	2W 005G	2W 01G	2W 02G	2W 04G	2W 06G	2W 08G	2W 10G	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at 0.375" (9.5mm) lead length (SEE FIG. 1)	I _{F(AV)}	2.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	60							A
Rating for fusing (t<8.3ms)	I ² t	15							A ² sec
Typical thermal resistance per leg (NOTE 1)	R _{θJA} R _{θJL}	40 15							°C/W
Operating junction temperature range	T _J	-55 to +150							°C
Storage temperature range	T _{STG}	-55 to +150							°C

Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	2W 005G	2W 01G	2W 02G	2W 04G	2W 06G	2W 08G	2W 10G	UNITS	
Maximum instantaneous forward voltage drop per leg at 2.0A	V _F	1.1							V	
Maximum DC reverse current at rated T _A =25°C DC blocking voltage per leg T _A =125°C	I _R	5.0 500							μA	
Typical junction capacitance per leg at 4.0V, 1MHz	C _J	40							20	pF

Notes:

(1) Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length P.C.B. mounting

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

FIG. 1 - DERATING CURVE OUTPUT RECTIFIED CURRENT

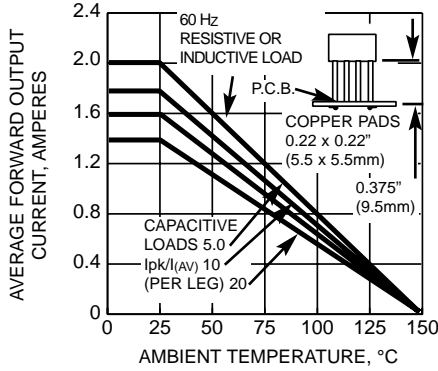


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

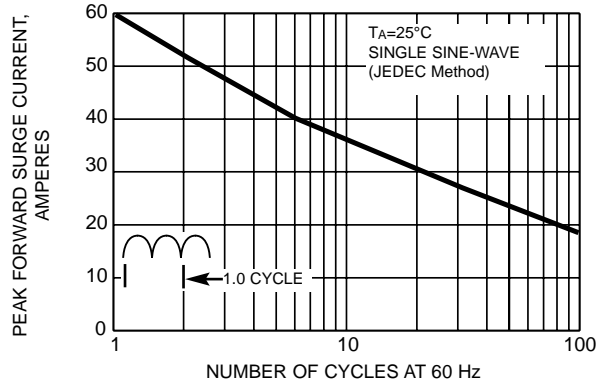


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS PER LEG

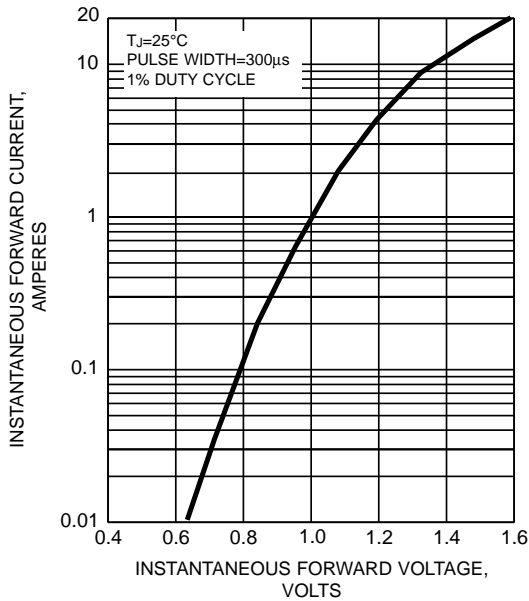


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS PER LEG

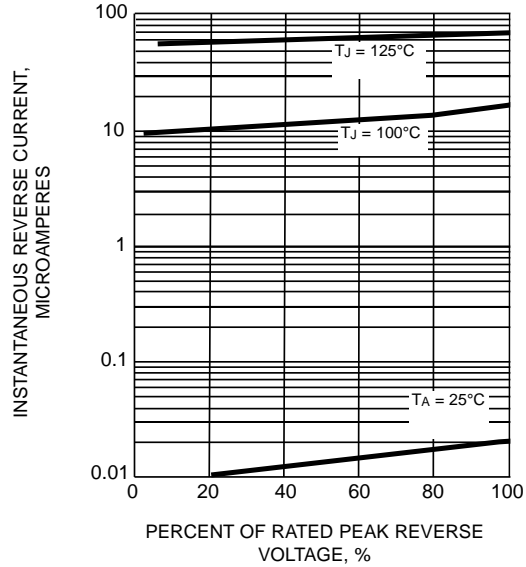


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

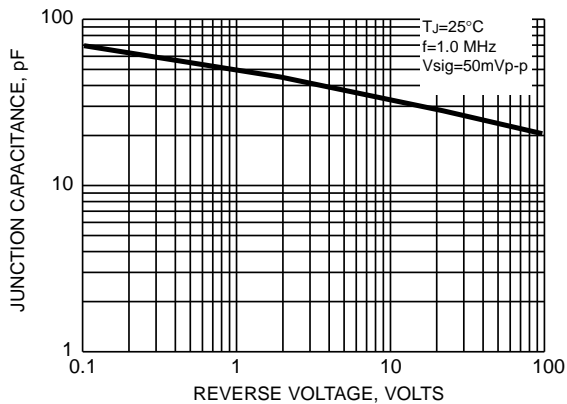


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

