

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 μ 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

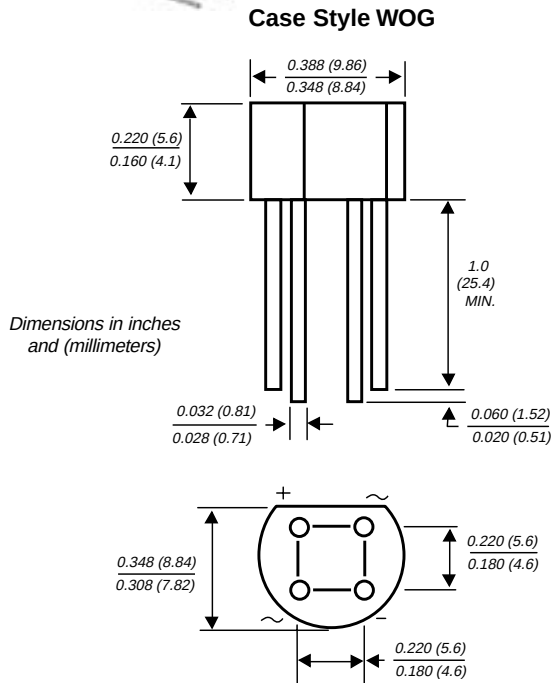
Mechanical Data

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



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^2t	15							A ² sec
Typical thermal resistance per leg (NOTE 1)	$R_{\theta JA}$ $R_{\theta JL}$	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 $T_A=25^\circ\text{C}$ DC blocking voltage per leg $T_A=125^\circ\text{C}$	I_R	5.0 500							μ A
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

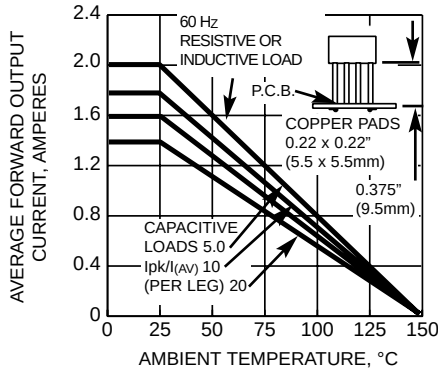


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

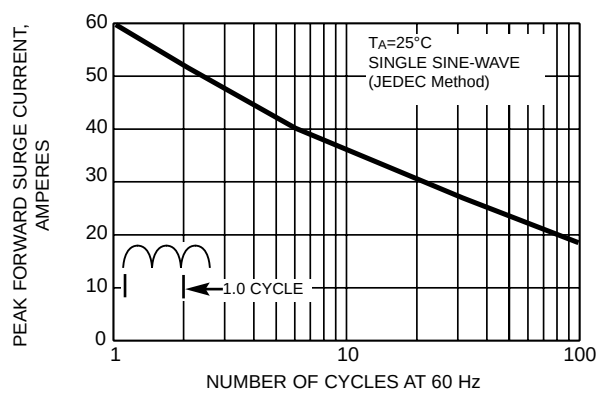


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS PER LEG

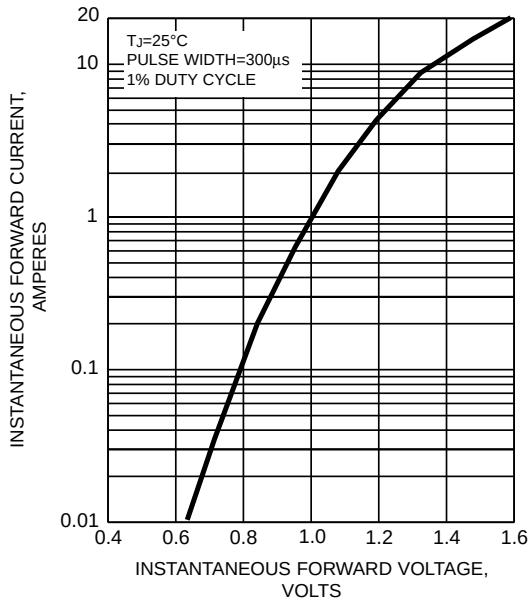


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS PER LEG

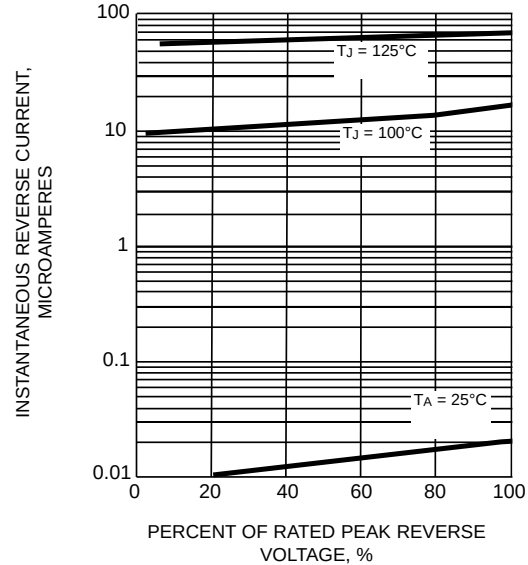


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

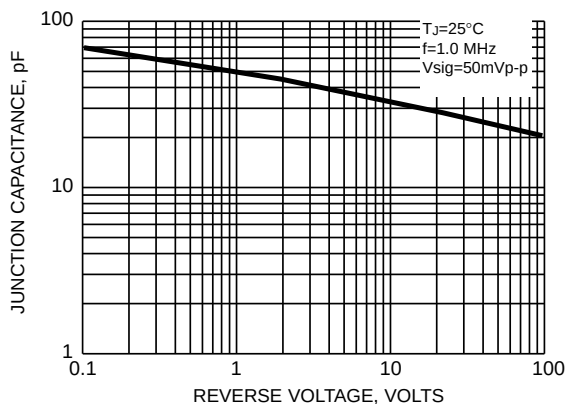


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

