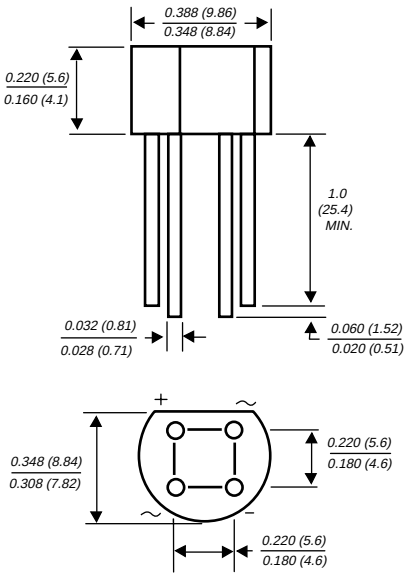
W005G THRU W10G

GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

***Reverse Voltage** - 50 to 1000 Volts* ***Forward Current** - 1.5 Amperes*

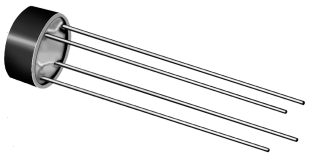
Case Style WOG



Dimensions in inches and (millimeters)

FEATURES

- Plastic material has Underwriters Laboratory Flammability Recognition 94V-0
- This series is UL listed under the Recognized Component Index, file number E54214
- Glass passivated chip junctions
- High case dielectric strength
- Typical I_R less than 0.1µA
- High overload surge 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 AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	W005G	W01G	W02G	W04G	W06G	W08G	W10G	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at 0.375" (9.5mm) lead length at T_A=25°C	$I_{(AV)}$	1.5							Amps
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50.0							Amps
Rating for fusing (t<8.3ms)	I^2t	10.0							A^2sec
Maximum instantaneous forward voltage drop per leg at 1.0A	V_F	1.0							Volts
Maximum DC reverse current at rated T_A=25°C DC blocking voltage per leg T_A=125°C	I_R	5.0 500.0							µA
Typical junction capacitance per leg (NOTE 1)	C_J	14.0							pF
Typical thermal resistance per leg (NOTE 2)	$R_{\Theta JA}$ $R_{\Theta JL}$	36.0 11.0							°C/W
Operating junction temperature range	T_J	-55 to +150							°C
Storage temperature range	T_{STG}	-55 to +150							°C

NOTES:

(1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

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

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RATINGS AND CHARACTERISTICS CURVES W005G THRU W10G

FIG.1 - DERATING CURVE OUTPUT RECTIFIED CURRENT

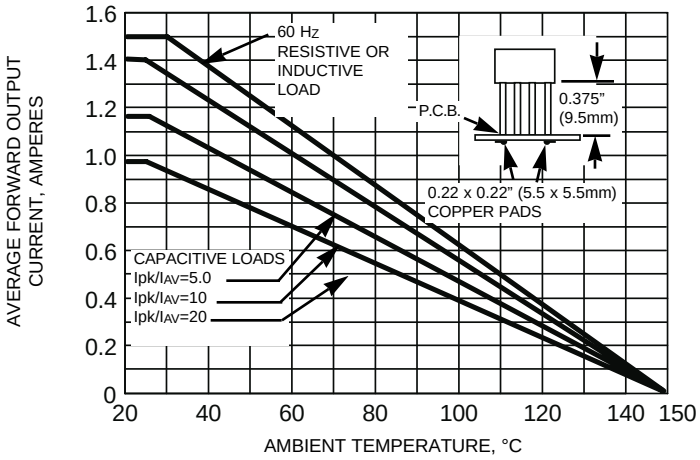


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

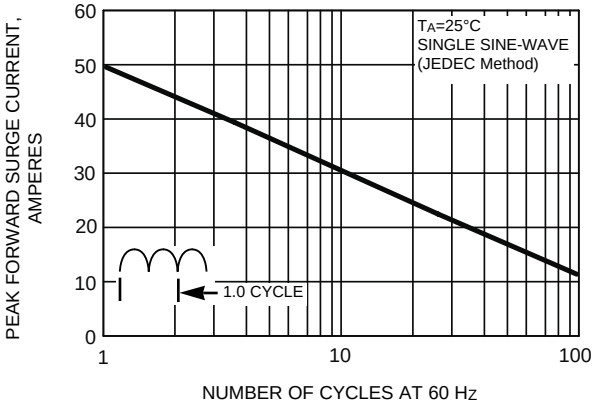


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS PER LEG

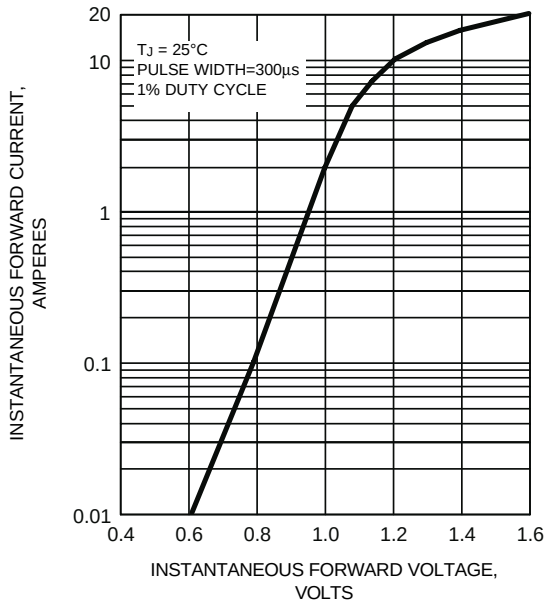


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS PER LEG

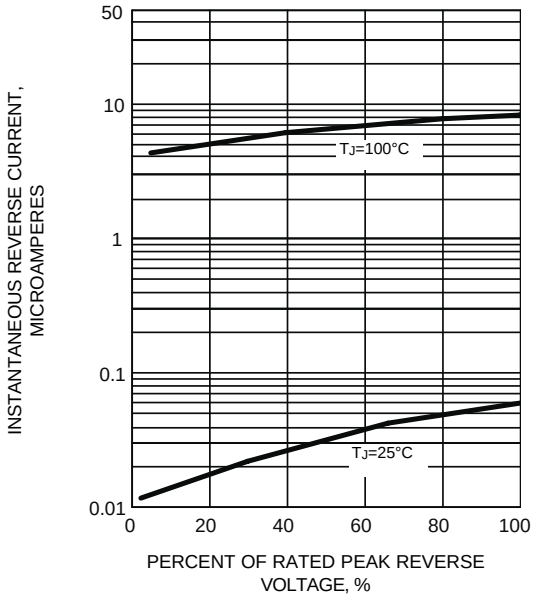


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

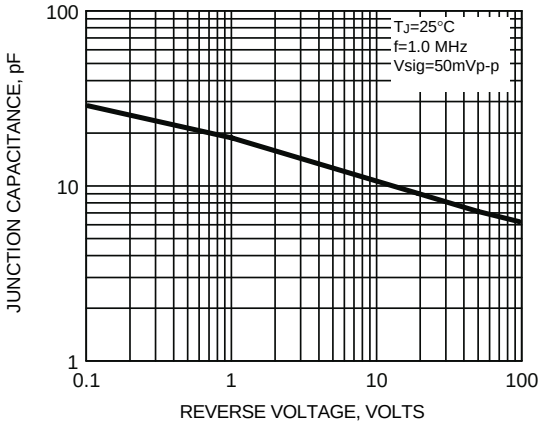
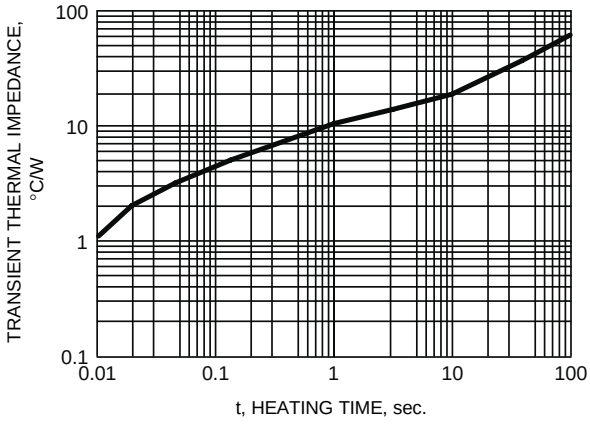


FIG. 6 -TYPICAL TRANSIENT THERMAL IMPEDANCE



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