

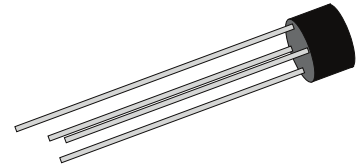
2W005G thru 2W10G

Silicon Bridge Rectifiers

Reverse Voltage 50V to 1000V Forward Current 2.0A

Features

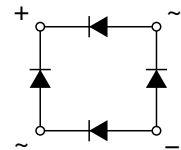
- The plastic package carries underwriters laboratory flammability classification 94V-0
- Ideal for printed circuit boards
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
260°C/10 seconds, 0.375"(9.5mm) lead length, 5 lbs (2.3kg) tension



WOB

Mechanical Data

- Case: Molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750, method 2026
- Polarity: Polarity symbols marked on case
- Mounting position: Any



Schematic Diagram

Absolute Maximum Ratings and Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.)

Parameter	Symbol	2W005G	2W01G	2W02G	2W04G	2W06G	2W08G	2W10G	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 Output Rectified Current at $T_A=50^\circ\text{C}^2$	$I_{(AV)}$	2.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50.0							A
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	10							A^2s
Maximum Instantaneous Forward Voltage Drop per Bridge Element at 1.0A	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_A=25^\circ\text{C}$							μA
		$T_A=100^\circ\text{C}$							mA
Typical Junction Capacitance ¹	C_J	16							pF
Typical Thermal Resistance ²	$R_{\theta JA}$	40							$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	T_J	-55 to +125							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$

Note:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V.
2. Unit mounted on P.C. board with 0.22" x 0.22"(5.5x5.5mm) copper pads, 0.375"(9.5mm) lead length.

Ratings and Characteristic Curves

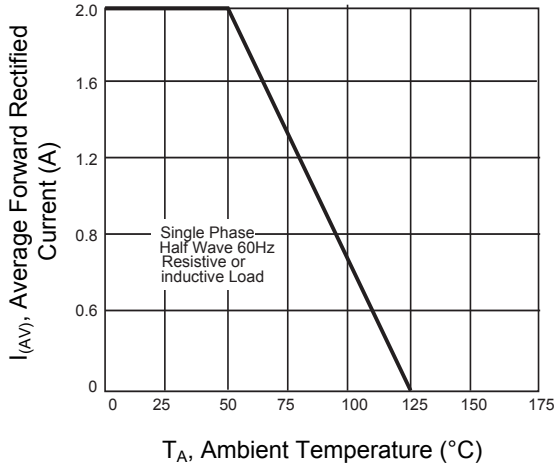


Figure 1. Forward Current Derating Curve

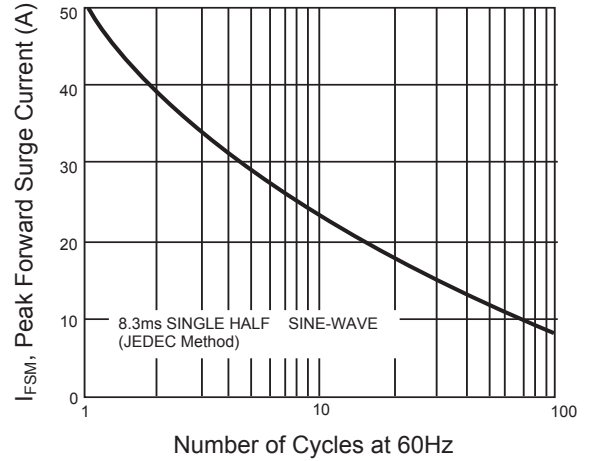


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

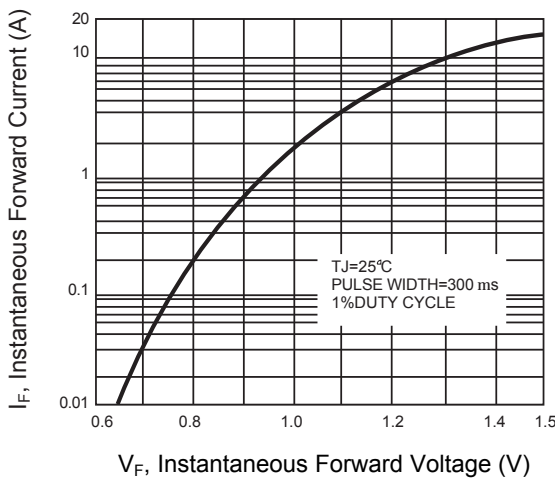


Figure 3. Typical Instantaneous Forward Characteristics

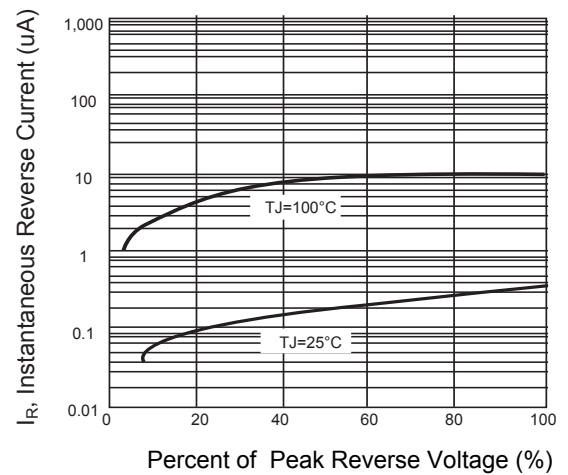


Figure 4. Typical Reverse Characteristics

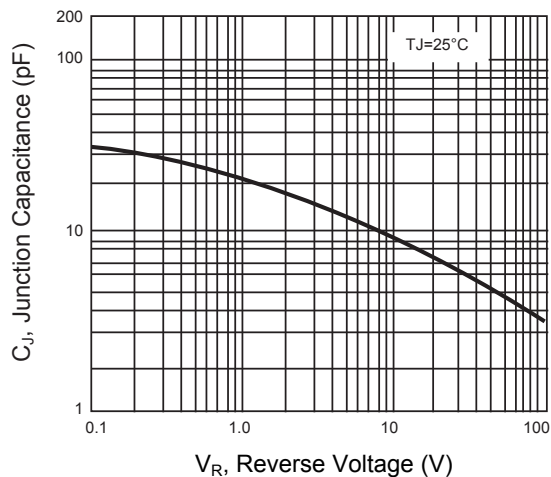


Figure 5. Typical Junction Capacitance

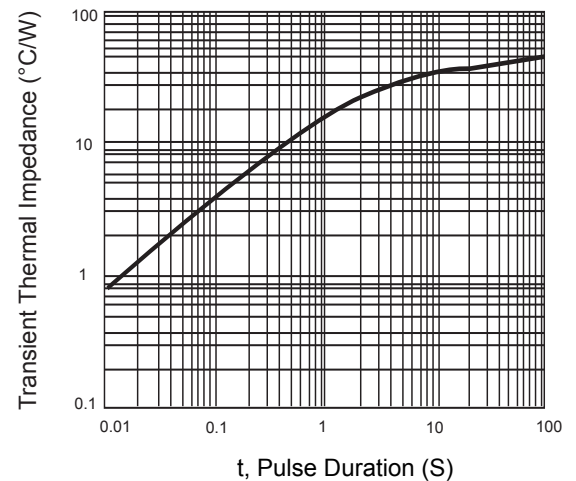
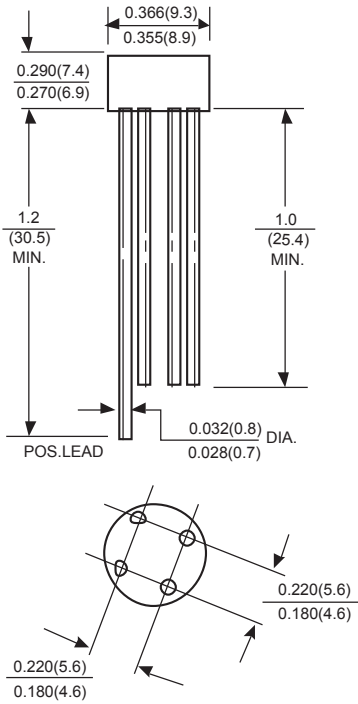


Figure 6. Typical Transient Thermal Impedance

Package Outline Dimensions (WOB)



Dimensions in inches and (millimeters)