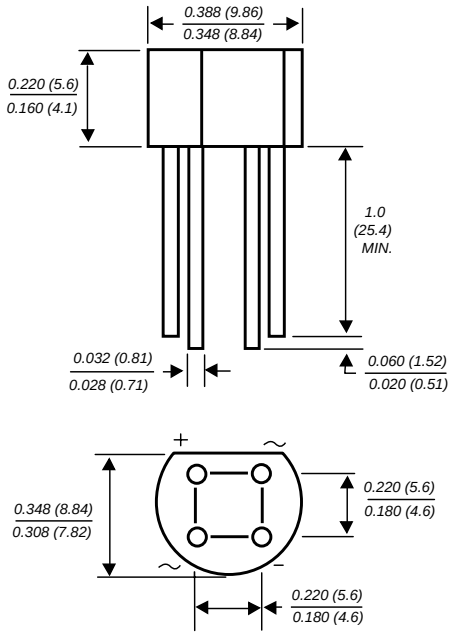
Vishay Semiconductors
formerly General Semiconductor

Glass Passivated Single-Phase Bridge Rectifier

Rectifier Reverse Voltage 50 and 1000 V
Rectifier Forward Current 2.0 A

Case Style WOG



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 0.5μA
- 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 oz., 1.1 g
Packaging codes/options:
1/100 EA. per Bulk Bag

Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	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 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^2sec
Typical thermal resistance per leg (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.

Parameter	Symbols	2W005G	2W01G	2W02G	2W04G	2W06G	2W08G	2W10G	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°C unless otherwise noted)

Fig. 1 — Derating Curve Output Rectified Current

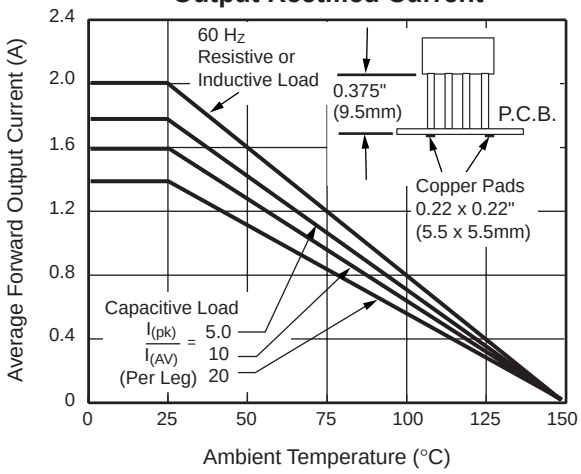


Fig. 2 — Maximum Non-Repetitive Peak Forward Surge Current Per Leg

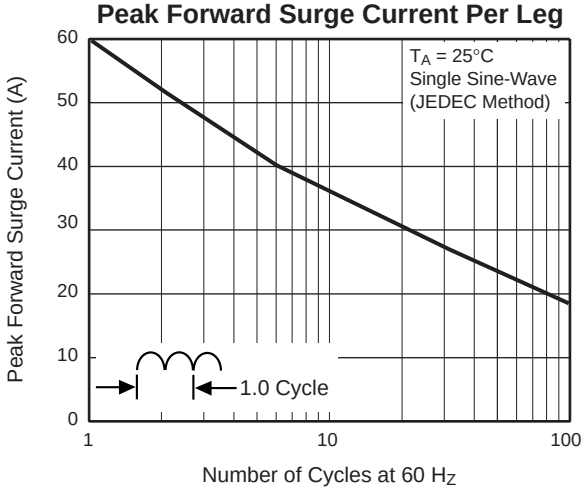


Fig. 3 — Typical Forward Characteristics Per Leg

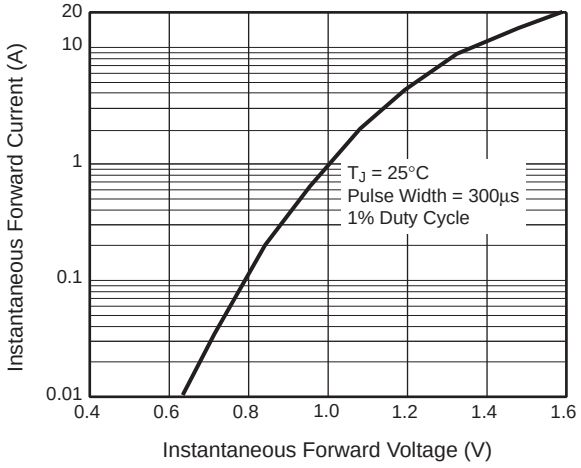


Fig. 4 — Typical Reverse Leakage Characteristics Per Leg

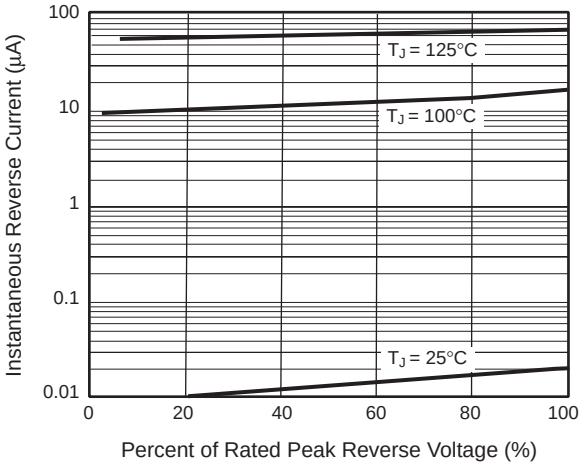


Fig. 5 — Typical Junction Capacitance Per Leg

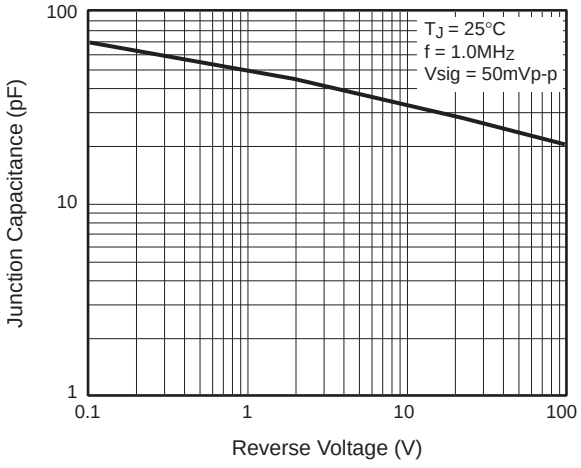


Fig. 6 — Typical Transient Thermal Impedance