

2W005G, 2W01G, 2W02G, 2W04G, 2W06G, 2W08G, 2W10G

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Vishay General Semiconductor

Glass Passivated Single-Phase Bridge Rectifier



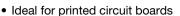


CTE	RISTICS	
	WO	G
	2.0	۸

PRIMARY CHARACTERISTICS							
Package	WOG						
I _{F(AV)}	2.0 A						
V _{RRM}	50 V, 100 V, 200 V, 400 V, 600 V, 800 V, 1000 V						
I _{FSM}	60 A						
I _R	5 μΑ						
V_F at $I_F = 2.0$ A	1.1 V						
T _J max.	150 °C						
Diode variations	Quad						

FEATURES





Typical I_R less than 0.5 μA

· High case dielectric strength

· High surge current capability

• Solder dip 260 °C, 40 s

• Material categorization: For definitions of compliance please see www.vishay.com/doc?99912





TYPICAL APPLICATIONS

General purpose use in AC/DC bridge full wave rectification for power supply, adapter, charger, lighting ballaster on consumers, and home appliances applications.

MECHANICAL DATA

Case: WOG

Molding compound meets UL 94 V-0 flammability rating Base P/N-E4 - RoHS-compliant, commercial grade

Terminals: Silver plated leads, solderable per

J-STD-002 and JESD22-B102

Polarity: As marked on body

MAXIMUM RATINGS (T _A = 25 °C unless otherwise noted)									
PARAMETER	SYMBOL	2W005G	2W01G	2W02G	2W04G	2W06G	2W08G	2W10G	UNIT
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" (9.5 mm) lead length at (fig. 1)	I _{F(AV)}				2.0				Α
Peak forward surge current single half sine-wave superimposed on rated load	I _{FSM}	60					Α		
Rating for fusing (t < 8.3 ms)	I ² t	15							A ² s
Operating junction and storage temperature range	T _J , T _{STG}	- 55 to + 150					°C		

ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)										
PARAMETER	TEST CONDITIONS	SYMBOL	2W005G 2W01G 2W02G 2W04G 2W06G 2W08G 2W10G							UNIT
Maximum instantaneous forward voltage drop per diode	I _F = 2.0 A	V _F	1.1					V		
Maximum DC reverse	T _A = 25 °C					5.0				
current at rated DC blocking voltage per diode	T _A = 125 °C	IR	500					μA		
Typical junction capacitance per diode	4.0 V, 1 MHz	CJ		40)			20		pF

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THERMAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)									
PARAMETER	SYMBOL	2W005G 2W01G 2W02G 2W04G 2W06G 2W08G 2W10G							UNIT
Typical thermal resistance (1)	$R_{\theta JA}$	40						°C/W	
Typical thermal resistance (*)	$R_{\theta JL}$	15					•	C/ VV	

Note

⁽¹⁾ Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5 mm) lead length PCB mounting

ORDERING INFORMATION (Example)									
PREFERRED P/N	RED P/N UNIT WEIGHT (g) PREFERRED PACKAGE CODE BASE QUANTITY DELIVERY MODE								
2W06G-E4/51	1.12	51	100	Plastic bag					

RATINGS AND CHARACTERISTICS CURVES (T_A = 25 °C unless otherwise noted)

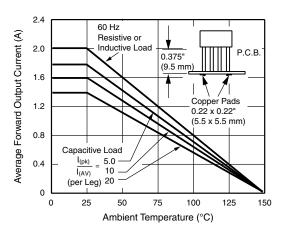


Fig. 1 - Derating Curve Output Rectified Current

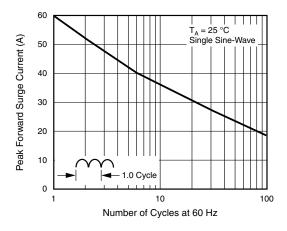


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Diode

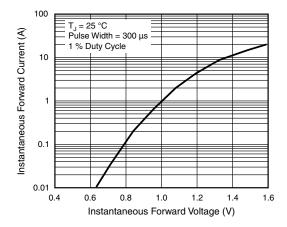


Fig. 3 - Typical Forward Characteristics Per Diode

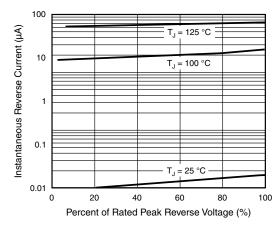
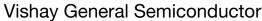


Fig. 4 - Typical Reverse Leakage Characteristics Per Diode



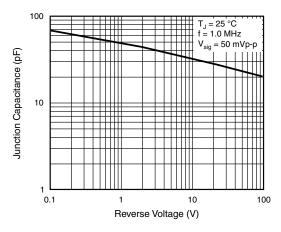


Fig. 5 - Typical Junction Capacitance Per Diode

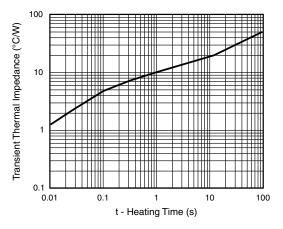


Fig. 6 - Typical Transient Thermal Impedance

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

Case Style WOG 0.388 (9.86) 0.220 (5.6) 0.160 (4.1) 1.0 (25.4) MIN. 0.032 (0.81) 0.060 (1.52) 0.028 (0.71) 0.020 (0.51) 0.220 (5.6) 0.348 (8.84) 0.180 (4.6) 0.308 (7.82) 0.220 (5.6) 0.180 (4.6)



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