2W005GM THRU 2W10GM

Single Phase 2.0 AMPS. Glass Passivated Bridge Rectifiers
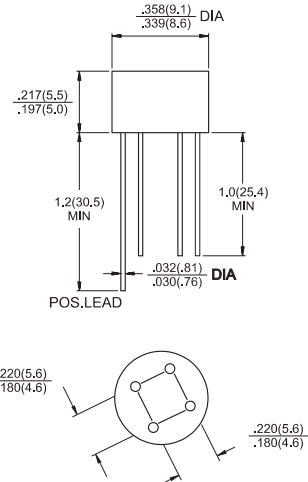
TSC

Voltage Range
50 to 1000 Volts
Current
2.0 Amperes

Features

◇ UL Recognized File # E-96005
◇ Glass passivated junction
◇ High surge current capability
◇ Ideal for printed circuit board
◇ Reliable low cost construction technique results in inexpensive product
◇ High temperature soldering guaranteed: 260℃ / 10 seconds / 0.375" (9.5mm) lead length at 5 lbs. (2.3 Kg) tension
◇ Weight: 1.10 grams

WOB

.358(9.1) / .339(8.6) DIA

.217(5.5) / .197(5.0)

1.2(30.5) MIN

1.0(25.4) MIN

.032(.81) / .030(.76) DIA

POS.LEAD

.220(5.6) / .180(4.6)

.220(5.6) / .180(4.6)

Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	2W 005GM	2W 01GM	2W 02GM	2W 04GM	2W 06GM	2W 08GM	2W 10GM	Units
Maximum Recurrent 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 @T_A = 50℃	$I_{(AV)}$	2.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	50							A
Maximum Instantaneous Forward Voltage @2.0A	V_F	1.1							V
Maximum DC Reverse Current @ T_A=25℃ at Rated DC Blocking Voltage @ T_A=125℃	I_R	10 500							uA uA
Typical Thermal Resistance (Note)	RθJA RθJL	40 15							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: Thermal Resistance from Junction to Ambient and from Junction to Lead at 0.375" (9.5mm) Lead Length for P.C.B. Mounting.

RATINGS AND CHARACTERISTIC CURVES (2W005GM THRU 2W10GM)

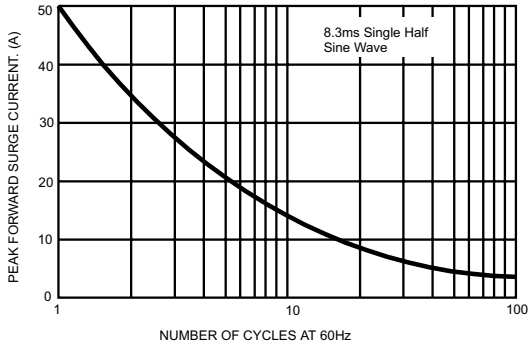### FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

8.3ms Single Half
Sine Wave

PEAK FORWARD SURGE CURRENT. (A)

NUMBER OF CYCLES AT 60Hz

FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

AVERAGE FORWARD CURRENT. (A)

AMBIENT TEMPERATURE. ($^{\circ}$C)
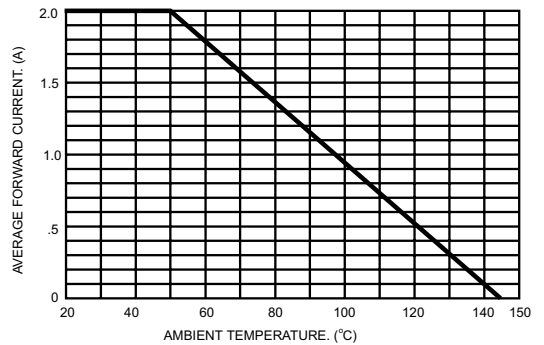
FIG.3- TYPICAL FORWARD CHARACTERISTICS
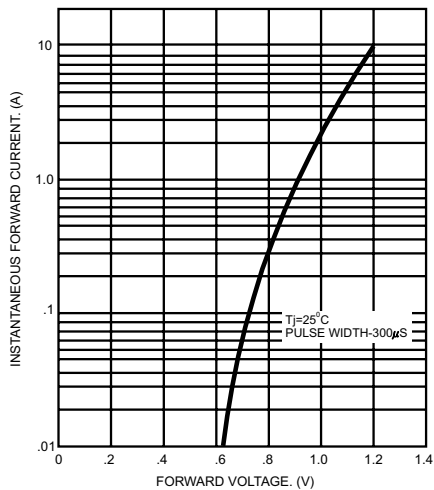
INSTANTANEOUS FORWARD CURRENT. (A)

Tj=25^{0}C
PULSE WIDTH-300μS

FORWARD VOLTAGE. (V)

FIG.4- TYPICAL REVERSE CHARACTERISTICS

INSTANTANEOUS REVERSE CURRENT. (μA)

Tj=125^{0}C

Tj=25^{0}C

PERCENT OF RATED PEAK REVERSE VOLTAGE. (%)