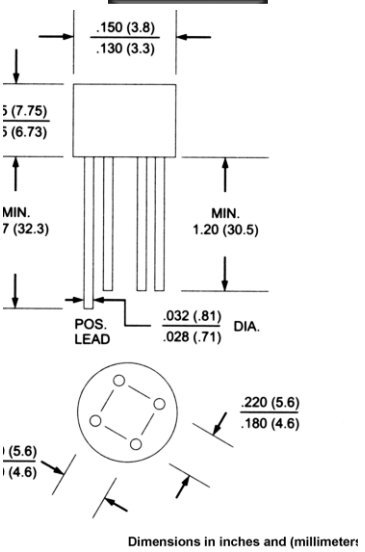
2W005 thru 2W10

Glass Passivated Single-Phase Bridge Rectifiers
Voltage Range 50 to 1000 Volts Forward Current 2.0 Amperes

Features

- Surge overload rating - 50 Amperes peak
- Ideal for printed circuit boards
- Reliable low cost construction utilizong molded plastic technique results in expersive product
- Mounting Position: Any
- Lead: Sliver plasted copper lead



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Parameter	Symbols	2W005	2W01	2W02	2W04	2W06	2W08	2W10	Units
Maximum recurrent 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 0.375" (9.5mm) lead length at T_A=25°C	$I_{F(AV)}$	2.0							Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50.0							Amps
Rating for fusing (t < 8.3ms)	I^2t	15.0							A^2sec
Max. instantaneous forward voltage drop per element at 2.0A	V_F	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage per element T_A=25°C T_A=100°C	I_R	10.0 1.0							uA mA
Typical junction capacitance per element (Note 1)	C_J	30							pF
Operating temperature range	T_J	-55 to +125							°C
Storage temperature range	T_{STG}	-55 to +150							°C

Notes: 1. Measured at 1.0MHz and applied reverse voltage of 4.0 volts

RATINGS AND CHARACTERISTIC CURVES

(T_A = 25°C unless otherwise noted)

FIG. 1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

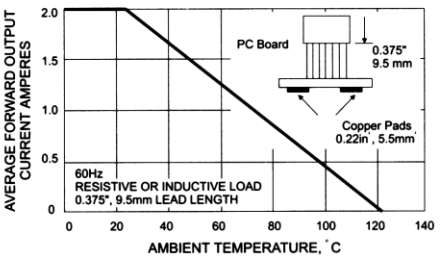


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

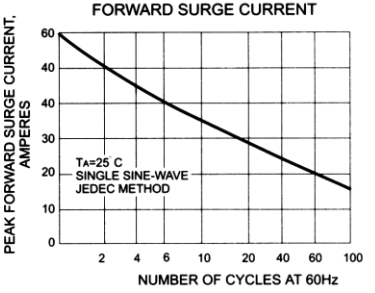


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

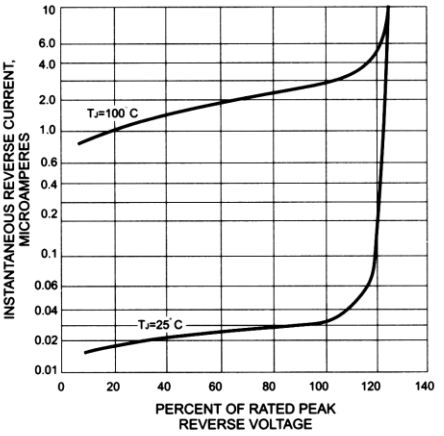


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

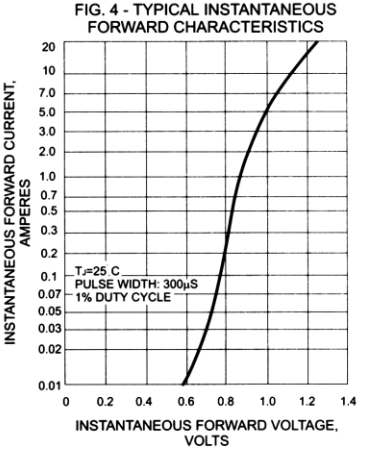


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT