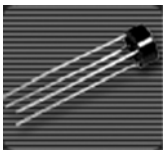
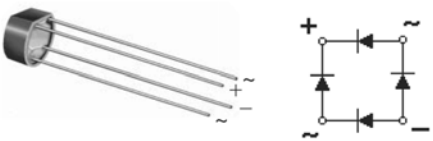
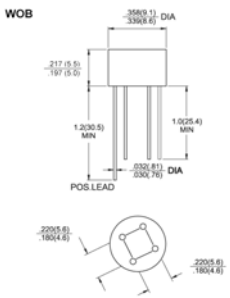
Glass Passivated Single-Phase Bridge Rectifier
Reverse Voltage 50 to 1000Volts , Forward Current 2.0 Amperes

Features

- Ideal for printed circuit boards
- Typical I_R less than 0.5 µA
- High case dielectric strength
- High surge current capability
- Solder Dip 260 °C, 40 seconds







Package outline dimensions in inches (millimeters)

Mechanical Data

- Case: WOB
  Epoxy meets UL-94V-0 Flammability rating
- Terminals: Silver plated (E4 Suffix) leads, solderable per J-STD-002B and JESD22-B102D
- Polarity: As marked on body

Typical Applications

General purpose use in ac-to-dc bridge full wave rectification for Power Supply, Adapter, Charger, lighting Ballaster on Consumers and Home Appliances applications

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

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 (See Fig.2 and Fig.1)	$I_{F(AV)}$	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 1.0A	V_F	1.1							Volts
Maximum DC reverse current T_A=25°C at rated DC blocking voltage per element	I_R	10.0 500 (Ta=100℃)							uA
Typical junction capacitance per element (Note 1)	C_J	40				20			pF
Typical thermal resistance per leg (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	40 15							°C/W
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
2. Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5 mm) lead length P.C.B. mounting

RATINGS AND CHARACTERISTIC CURVES

(T_A = 25°C unless otherwise noted)

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

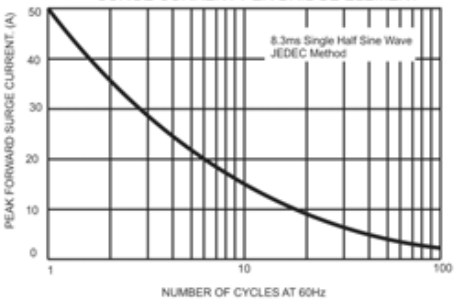


FIG.2- MAXIMUM CURRENT DERATING CURVE OUTPUT RECTIFIED CURRENT

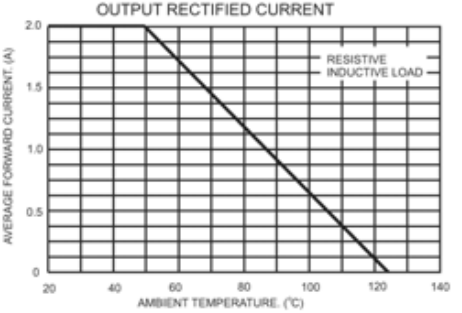


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

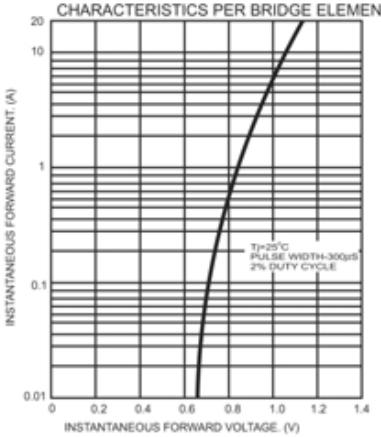


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT