



WL005 - WL10

PRV : 50 - 1000 Volts

Io : 1.0 Ampere

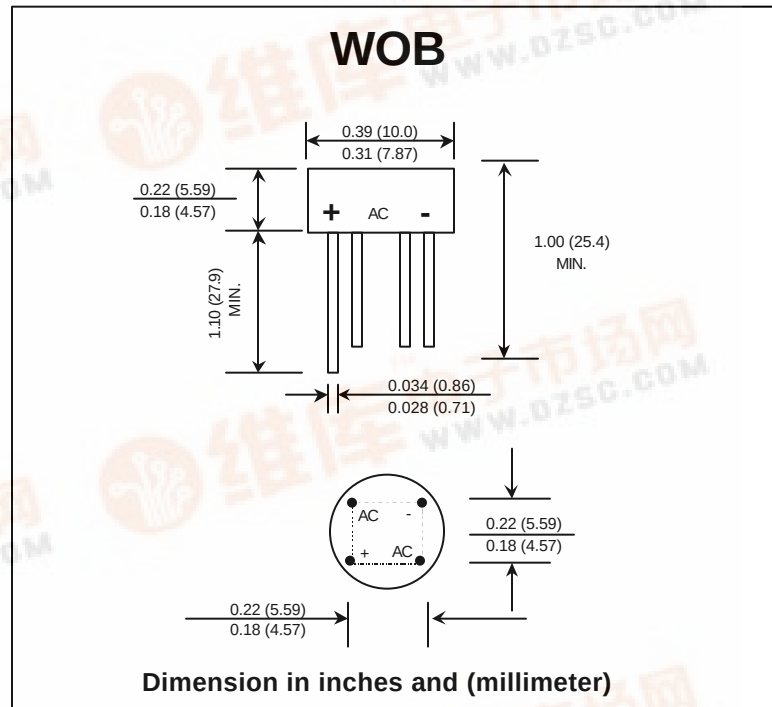
FEATURES :

- * High case dielectric strength
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Ideal for printed circuit board

MECHANICAL DATA :

- * Case : Reliable low cost construction utilizing molded plastic technique
- * Epoxy : UL94V-O rate flame retardant
- * Terminals : Plated leads solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Polarity symbols marked on case
- * Mounting position : Any
- * Weight : 1.29 grams

SILICON BRIDGE RECTIFIERS



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%.

RATING	SYMBOL	WL005	WL01	WL02	WL04	WL06	WL08	WL10	UNIT
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 Current 0.375" (9.5 mm) lead length T _c = 50°C	I _{F(AV)}	1.0							Amps.
Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method)	I _{FSM}	30							Amps.
Rating for fusing (t < 8.3 ms.)	I _t ²	10							A ² S
Maximum Forward Voltage per Diode at I _F = 1.0 Amp.	V _F	1.2							Volts
Maximum DC Reverse Current T _a = 25 °C	I _R	10							μA
at Rated DC Blocking Voltage T _a = 100 °C	I _{R(H)}	1.0							mA
Typical Junction Capacitance per Diode (Note 1)	C _J	24							pf
Typical Thermal Resistance (Note 2)	R _{θJA}	36							°C/W
Operating Junction Temperature Range	T _J	- 50 to + 150							°C
Storage Temperature Range	T _{STG}	- 50 to + 150							°C

1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.

2) Thermal resistance from Junction to Ambient at 0.375" (9.5 mm) lead length P.C. Board mounting.

RATING AND CHARACTERISTIC CURVES (WL005 - WL10)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

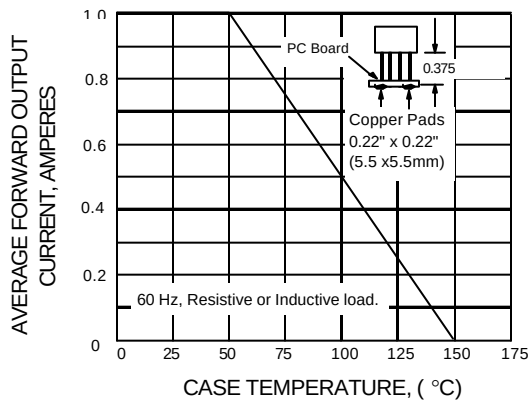


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

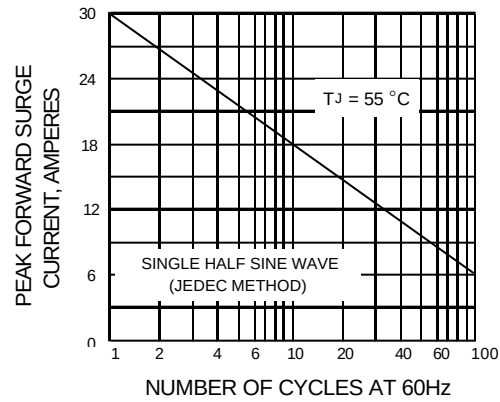


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

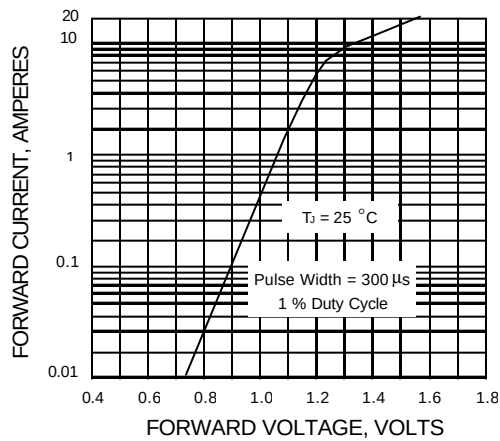


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

