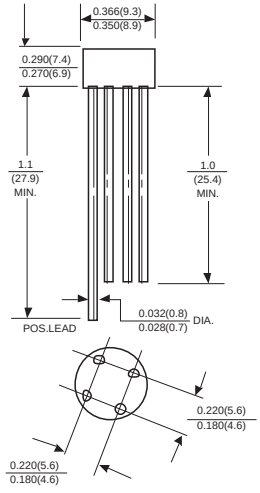
W005L THRU W10L

SILICON BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 1.5 Amperes

RC-2



Dimensions in inches and (millimeters)

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Ideal for printed circuit boards
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
  260℃/10 seconds,0.375”(9.5mm) lead length,
  5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: Molded plastic body
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Polarity: Polarity symbols marked on case
Mounting Position: Any
Weight:0.05 ounce, 1.42 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz,resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	W005L	W01L	W02L	W04L	W06L	W08L	W10L	UNITS
Maximum repetitive 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 output rectified current at T_A=25℃(Note 2)	$I_{(AV)}$	1.5							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	10							A^2s
Maximum instantaneous forward voltage drop per birdge element at 1.5A	V_F	1.0							Volts
Maximum DC reverse current T_A=25°C	I_R	10							uA
at rated DC blocking voltage T_A=100°C		0.5							mA
Typical Junction Capacitance (Note 1)	C_J	15							pF
Typical Thermal Resistance	R_{qJA}	40							℃/W
Operating junction temperature range	T_J	-55 to +125							°C
storage temperature range	T_{STG}	-55 to +150							°C

NOTES:
1.Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2.Unit mounted on P.C. board with 0.22” x 0.22”(5.5x5.5mm) copper pads,0.375”(9.5mm) lead length.

RATINGS AND CHARACTERISTIC CURVES W005L THRU W10L

FIG. 1- FORWARD CURRENT DERATING CURVE

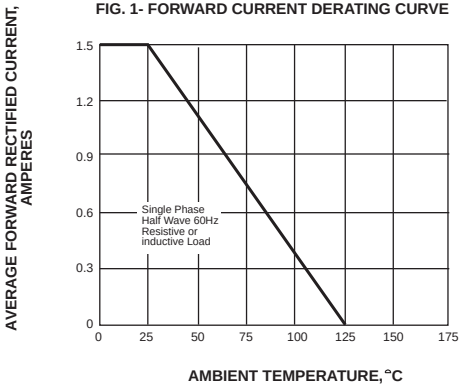


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

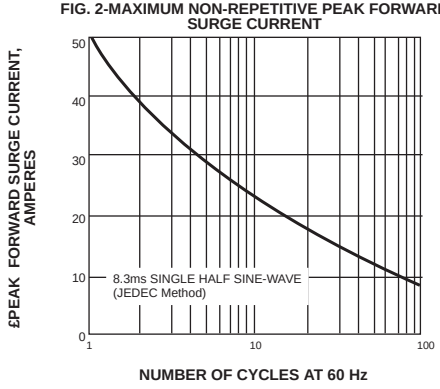


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

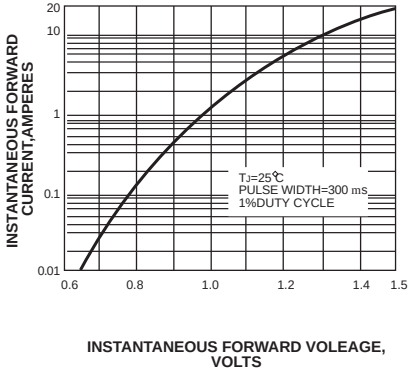


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

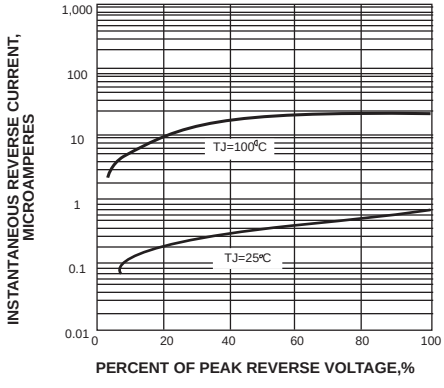


FIG. 5-TYPICAL JUNCTION CAPACITANCE

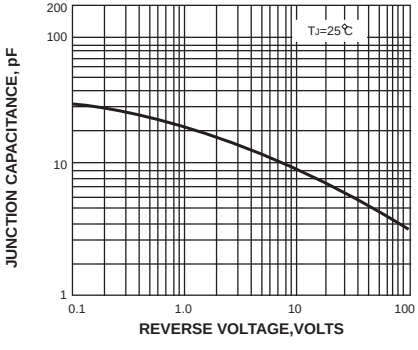


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE