W005 THRU W10

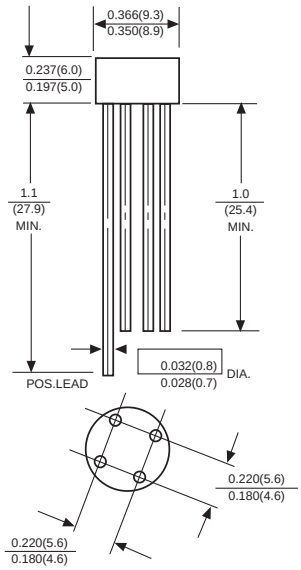
Reverse Voltage - 50 to 100 0 Volts Forward Current - 1.5 Amperes

SILICON BRIDGE RECTIFIERS

Features

WOM RoHS COMPLIANT

- 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°C/10 seconds,0.375”(9.5mm) lead length, 5 lbs. (2.3kg) tension



Dimensions in inches and (millimeters)

Mechanical Data

Case : JEDEC WOM Molded plastic body
Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
Polarity : Polarity symbol marking on body
Mounting Position : Any
Weight : 0.042 ounce, 1.2 grams

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwisespecified.

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

Parameter	*SYMBOLS*	W005	W01	W02	W04	W06	W08	W10	UNITS
Marking Code		MDD W005	MDD W01	MDD W02	MDD W04	MDD W06	MDD W08	MDD W10	
Maximum repetitive 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 output rectified current at Tc=25°C (Note 2)	$I_{(AV)}$	1.5							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50.0							A
Rating for Fusing(t<8.3ms)	I^2t	10							A^2s
Maximum instantaneous forward voltage drop per birdge element at 1.0A	V_F	1.0							V
Maximum DC reverse current T_A=25°C	I_R	10							μA
at rated DC blocking voltage T_A=100°C		0.5							mA
Typical Junction Capacitance (Note 1)	C_J	15							pF
Typical Thermal Resistance	$R\theta_{JA}$	40							°C/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.

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Ratings And Characteristic Curves

FIG. 1- FORWARD CURRENT DERATING CURVE

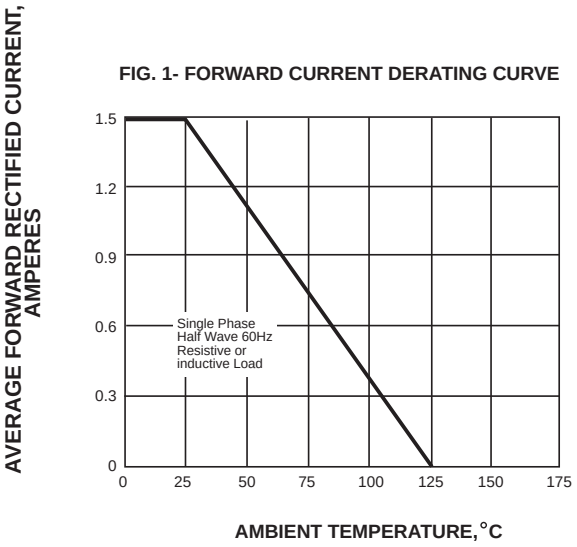


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

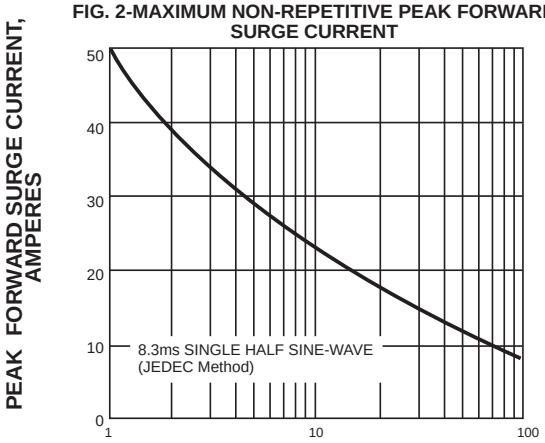


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

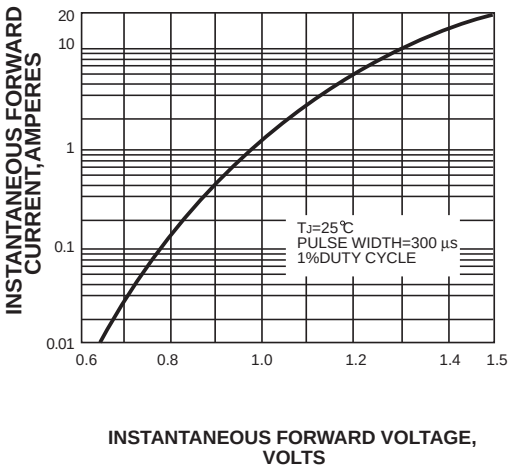


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

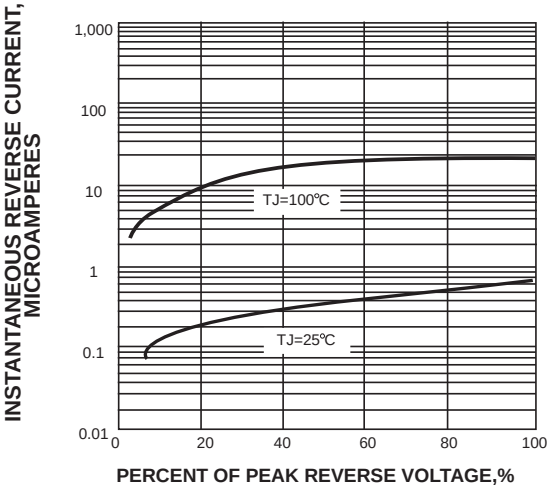


FIG. 5-TYPICAL JUNCTION CAPACITANCE

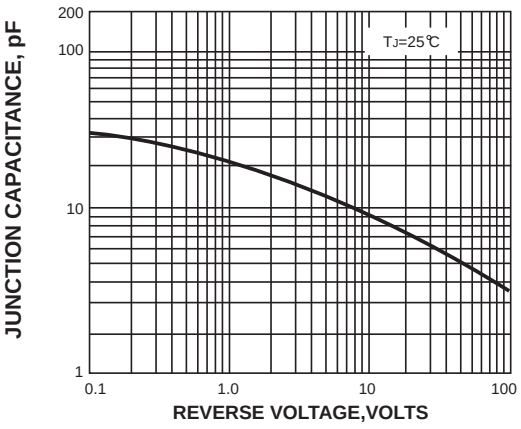
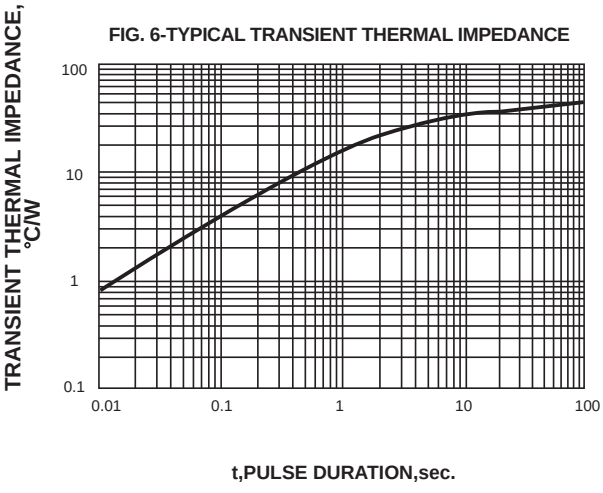


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



The curve above is for reference only.

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