



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

W005M
THRU
W10M

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts CURRENT - 1.5 Amperes

FEATURES

- * Surge overload ratings to 50 Amperes peak
- * Good for printed circuit board assembly

MECHANICAL DATA

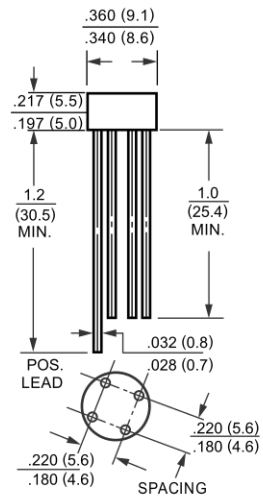
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: As marked
- * Mounting position: Any
- * Weight: 1.20 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%.



WOM



	SYMBOL	W005M	W01M	W02M	W04M	W06M	W08M	W10M	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current at TA = 25°C	IO	1.5							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	50							Amps
Maximum Forward Voltage Drop per element at 1.0A DC	VF	1.0							Volts
Maximum Reverse Current at Rated DC Blocking Voltage per element	IR	@TA = 25°C							uAmps
		@TA = 100°C							
I ² t Rating for Fusing (t<8.3ms)	I ² t	10							A ² Sec
Typical Junction Capacitance (Note1)	CJ	24							pF
Typical Thermal Resistance (Note 2)	RθJA	36							°C/W
Operating Temperature Range	TJ	-55 to + 125							°C
Storage Temperature Range	TSTG	-55 to + 150							°C

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

2. Thermal Resistance from Junction to Ambient and from junction to lead mounted on P.C.B. with 0.5 x 0.5" (13x13mm) copper pads.



RATING AND CHARACTERISTIC CURVES (W005M THRU W10M)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

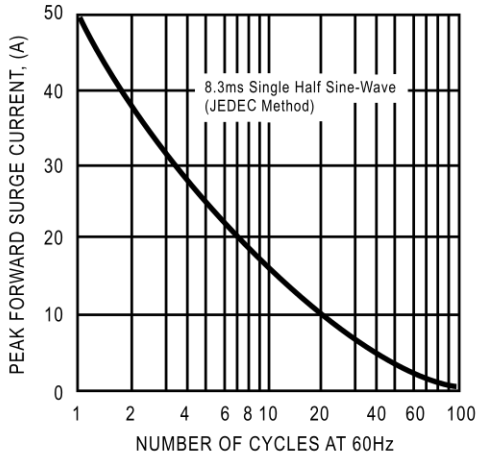


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

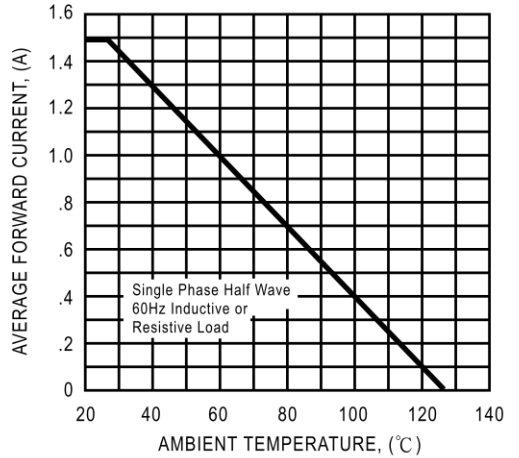


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

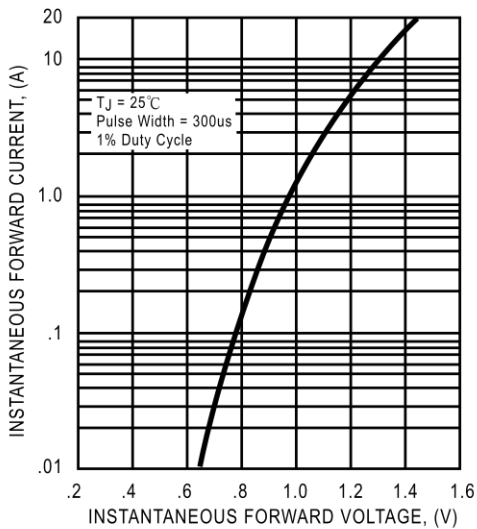
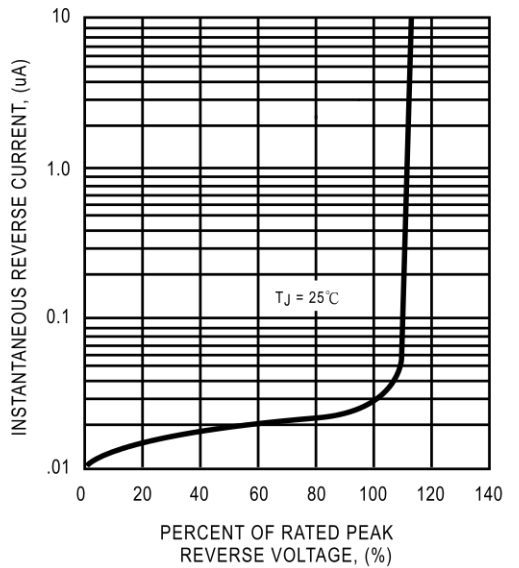


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



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