DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

W005M THRU W10M

TECHNICAL SPECIFICATIONS OF SINGAL-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts *CURRENT - 1.5 Amperes*

FEATURES

* Surge overload ratings to 50 Amperes peak
* Ideal for printed circuit board

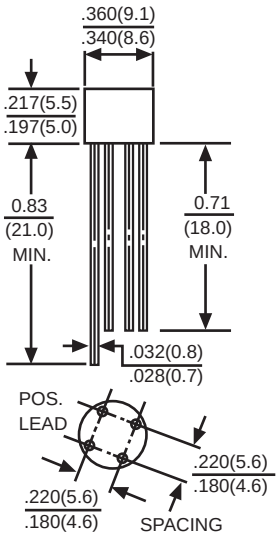
MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-0 rated flame retardant
* Lead: MIL-STD-202E, Method 208 guaranteed
* Polarity: Symbols molded or marked on body
* Mounting position: Any
* Weight: 1.2 grams approx.

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, derate current by 20%.

WOM



Dimensions in inches and (millimeters)

		SYMBOL	W005M	W01M	W02M	W04M	W06M	W08M	W10M	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 at T_A = 25°C		I_O	1.5							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	50							Amps
Maximum DC Forward Voltage Drop per Element at 1.5A		V_F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ T_A=25°C	I_R	10							μAmps
	@ T_A=100°C		500							
Typical Junction Capacitance (Note 1)		C_J	25							pF
Typical Thermal Resistance (Note 2)		$R_{\theta JA}$	40							°C/W
Operating and Storage Temperature Range		T_J,T_{STG}	-55 to +150							°C

Note 1: Measured at 1.0 MHZ and applied reverse voltage of 4.0V DC.
Note 2: Typical thermal resistance from junction to ambient.

RATING AND CHARACTERISTIC CURVES (W005M THRU W10M)

FIG. 1
TYPICAL FORWARD CURRENT
DERATING CURVE

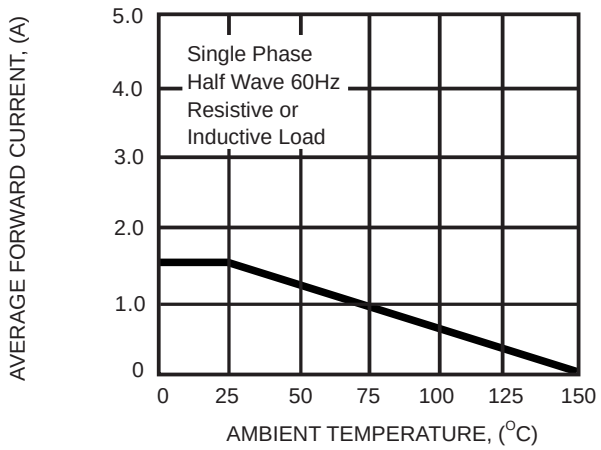


FIG. 2
MAXIMUM NON-REPETITIVE FORWARD
SURGE CURRENT

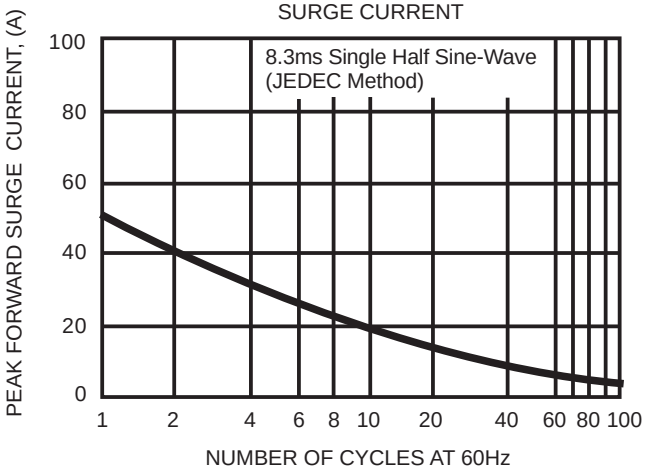


FIG. 3
TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

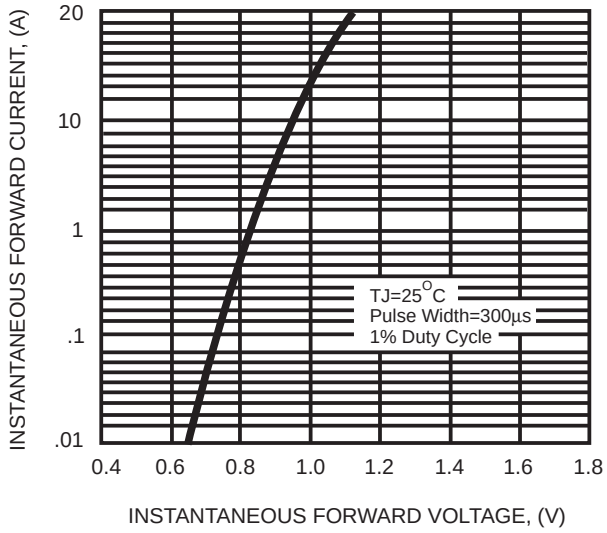
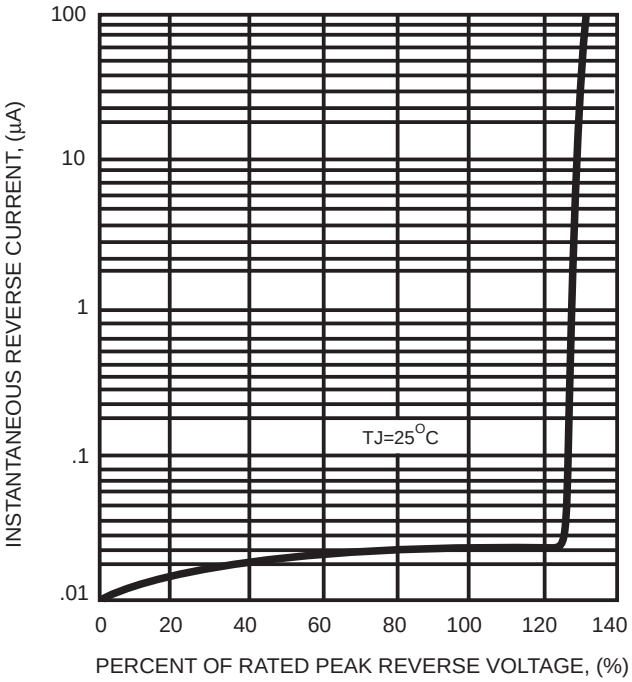


FIG. 4
TYPICAL REVERSE CHARACTERISTICS



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