

SINGLE PHASE BRIDGE RECTIFIER

W005M THRU W10M

VOLTAGE RANGE CURRENT 50 to 1000 Volts 1.5 Ampere

FEATURES

 Plastic package has UL flammability Classification 94V-0

• This series UL recognized

• High Surge current capability

• High temperature soldering guaranteed: 260°C / 10 seconds

MECHANICAL DATA

• Case: Molded plastic body

• Terminal: Plated leads solderable per MIL-STD-202E

method 208C

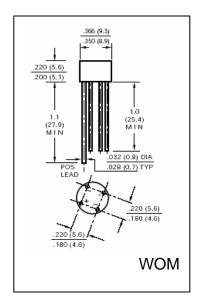
Mounting position: AnyWeight: 0.042 ounce, 1.2 gram

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%



	SYMBOLS	W	W	W	W	W	W	W	UNIT
		005M	01M	02M	04M	06M	08M	10M	UNII
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 Rectified Current, At $T_C = 25^{\circ}C$ (Note 1)	$I_{(AV)}$	1.5						Amps	
Peak Forward Surge Current									
8.3mS single half sine wave superimposed on	I_{FSM}	50							Amps
rated load (JEDEC method)									
Rating for Fusing (t<8.3mS)	I^2t	10						A^2s	
Maximum Instantaneous Forward Voltage per element at 1.0A	V_{F}	1.0							Volts
Maximum DC Reverse Current at Rated $T_A = 25$ °C	т	10							μА
DC Blocking Voltage per element $T_A = 100$ $^{\circ}$ C	I_R	500							
Typical Junction Capacitance, per leg (Measured at 1.0MHz and applied reverse voltage of 4.0V)	C_{J}	15							pF
Typical Thermal Resistance per leg (Note 1)	$R_{\theta JA}$	40						^o C/W	
Operating Junction Temperature Range	T_{J}	(-55 to +125)							°C
Storage Temperature Range	T_{STG}	(-55 to +150)							°C

Notes:

1. Mounted on PCB with 0.22" x 0.22" (5.5mm x 5.5mm) copper pads and 0.375" (9.5mm lead length

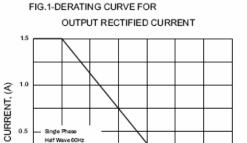


Haff Wave 60Hz Resistive or inductive Load 0.375* (95mm) Lead Length

AVERAGE FORWARD OUTPUT

0

RATINGS AND CHARACTERISTIC CURVES W005M THRU W10M



25 50 75 100 125 1 AMBIENT TEMPERATURE, (C) 175

150

FIG.3-TYPICAL FORWARD CHARACTERISTICS

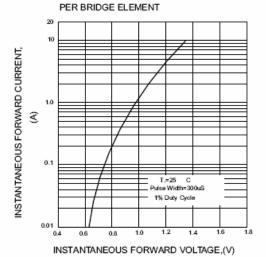


FIG.5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

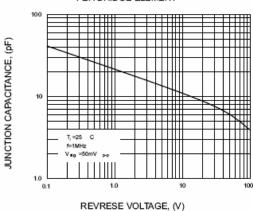


FIG.2-MAXIMUM NON-REPETITIVE PEAK

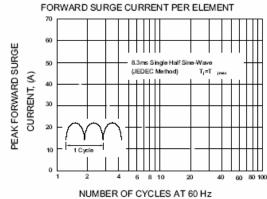
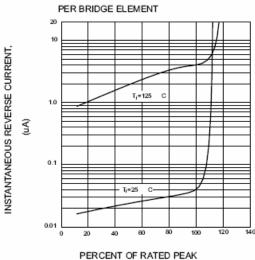


FIG.4-TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE, (%)