



# Frontier Electronics Corp.

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## 1.5A SILICON SINGLE-PHASE BRIDGE RECTIFIERS

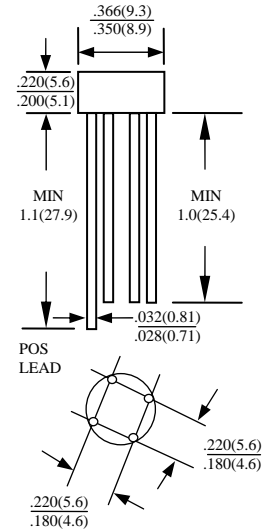
### W-005M-LFR THRU W-10M-LFR

#### FEATURES

- PLASTIC MATERIAL USED CARRIES UNDERWRITERS LABORATORY FLAMMABILITY RECOGNITION 94V-0
- HIGH CASE DIELECTRIC STRENGTH
- TYPICAL IR LESS THAN 1 $\mu$ A
- HIGH OVERLOAD SURGE CAPABILITY
- IDEAL FOR PRINTED CIRCUIT BOARD
- ROHS

#### MECHANICAL DATA

- CASE: EPOXY CASE, DIMENSIONS IN INCHES AND (MILLIMETERS)
- TERMINALS: LEADS SOLDERABLE PER MIL-STD-202 METHOD 208
- MOUNTING POSITION: ANY
- WEIGHT: 1.1 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%

RATINGS	SYMBOL	W-005M -LFR	W-01M -LFR	W-02M -LFR	W-04M -LFR	W-06M -LFR	W-08M -LFR	W-10M -LFR	UNITS
MAXIMUM RECURRENT 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 RECTIFIED CURRENT 0.375" (9.5mm) LEAD LENGTH AT $T_A=25^\circ\text{C}$	$I_O$	1.5							A
PEAK FORWARD SURGE CURRENT SINGLE SINE-WAVE SUPERIMPOSED ON RATED LOAD	$I_{FSM}$	50							A
STORAGE TEMPERATURE RANGE	$T_{STG}$	- 55 TO + 150							°C
OPERATING TEMPERATURE RANGE	$T_{OP}$	- 55 TO + 125							°C

#### ELECTRICAL CHARACTERISTICS ( $A_T T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	W-005M -LFR	W-01M -LFR	W-02M -LFR	W-04M -LFR	W-06M -LFR	W-08M -LFR	W-10M -LFR	UNITS
MAXIMUM INSTANTANEOUS FORWARD VOLTAGE DROP PER ELEMENT AT 1.0A	$V_F$	1.1							V
MAXIMUM REVERSE LEAKAGE AT RATED DC $T_A=25^\circ\text{C}$	$I_r$	10							$\mu\text{A}$

# RATINGS AND CHARACTERISTIC CURVES W-005M-LFR THRU W-10M-LFR

FIG. 1 - DERATING CURVE OUTPUT RECTIFIED CURRENT

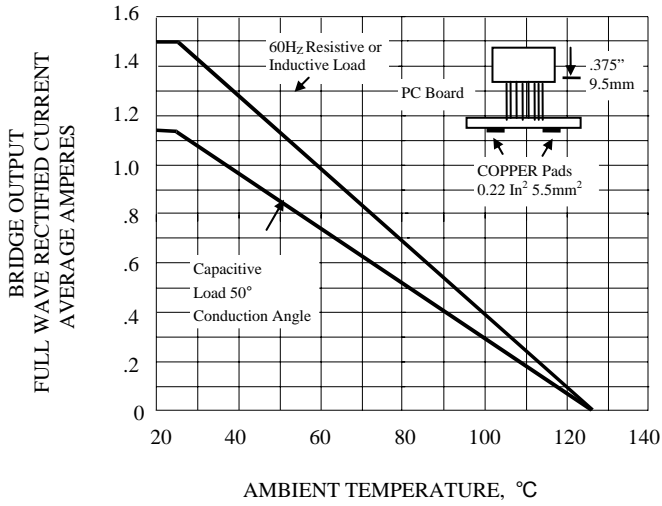


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

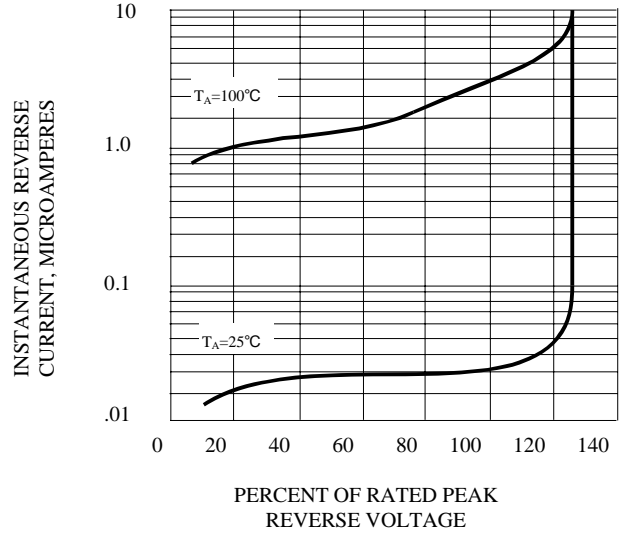


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS PER ELEMENT

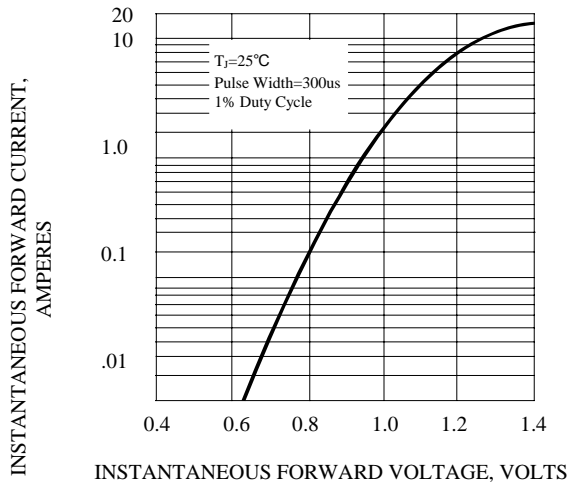


FIG. 4 - TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

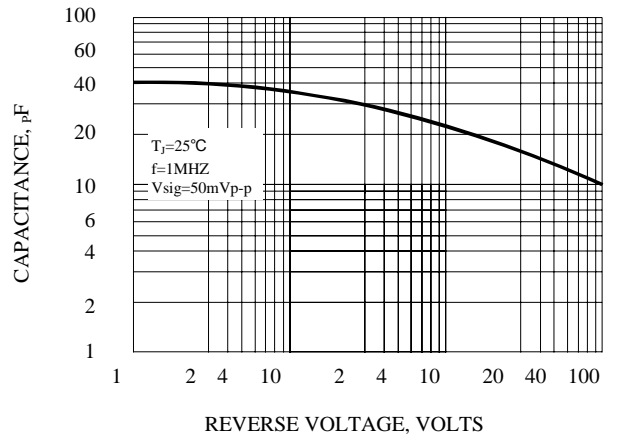


FIG. 5 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

