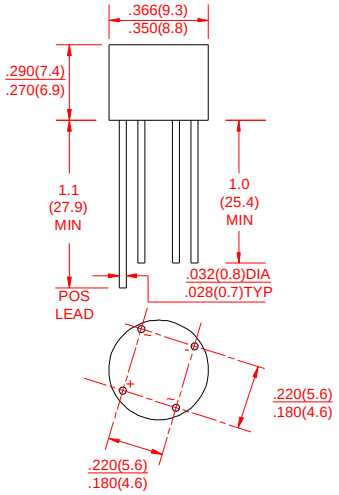
MASTER INSTRUMENT CORPORATION

SINGLE-PHASE BRIDGE RECTIFIER
2W005M THRU 2W10M
RC201 THRU RC207

VOLTAGE RANGE 50 to 1000 Volts
CURRENT 1.5 Amperes

FEATURES
- Low cost
- This series is UL recognized under component index,file number E127707
- High forward surge current capability
- Ideal for printed circuit board
- High temperature soldering guaranteed: 260°C/10 second, 0.375"(9.5mm) lead length at 5 lbs. (2.3kg) tension.

MECHANICAL DATA
- Case: Molded plastic body
- Terminal: Lead solderable per MIL-STD-202E method 208C.
- Polarity: Polarity symbols molded on case
- Mounting position: Any
- Weight:0. 05ounce, 1.42grams



Dimensions in inches and (millimeters)

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	2W005M RC201	2W01M RC202	2W02M RC203	2W04M RC204	2W06M RC205	2W08M RC206	2W10M RC207	UNITS
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 Output Current, at T_A=25℃	$I_{(AV)}$	1.5							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50							Amps
Rating for Fusing(t<8.3ms)	I^2T	10							A^2S
Maximum Instantaneous Forward Voltage at 1.0A	V_F	1.0							Volts
Maximum DC Reverse Current at rated DC blocking voltage, T_A=25℃	I_R	5.0							μAmps
Maximum DC Reverse Current at rated DC blocking voltage, T_A=100℃	I_R	0.5							mAmps
Typical Junction Capacitance(Note1)	C_J	15							P^F
Typical Thermal Resistance(Note2)	$R_{\theta JA}$	40							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

NOTES:
1. Measured at 1.0MHz and applied reverse voltage of 4.0 volts.
2. Unit mounted on P.C. board with 0.22"×0.22"(5.5×5.5mm)copper pads,0.375"(9.5mm)lead length.

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RATINGS AND CHARACTERISTIC CURVES 2W005M THRU 2W10M

FIG.1–DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

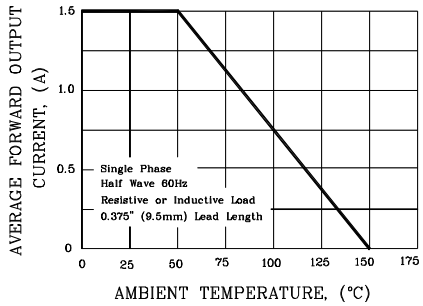

FIG.2–MAXIMUM NON–REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

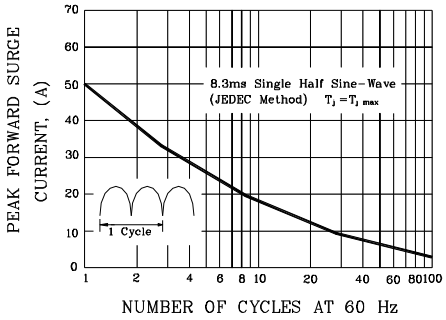

FIG.3–TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

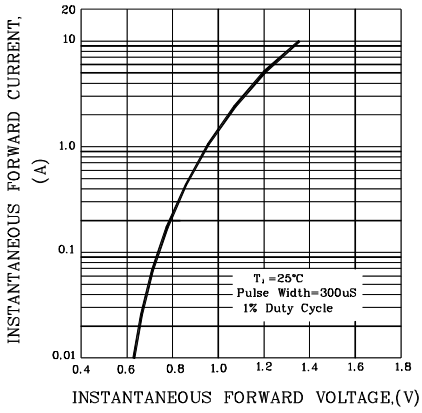

FIG.4–TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

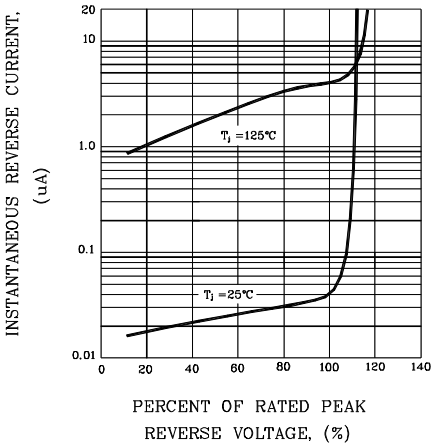

FIG.5–TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT