RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

MDA970G1 THRU MDA970G10

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 4.0 Amperes

Discontinued

FEATURES

* Ideal for printed circuit board
* Surge overload rating: 150 amperes peak
* Mounting position: Any
* Weight: 4.8 grams

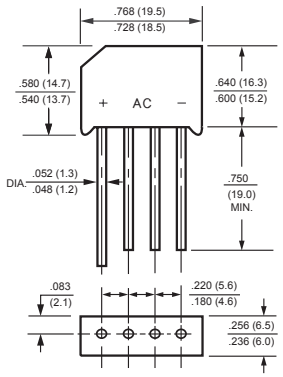
MECHANICAL DATA

* UL listed the recognized component directory, file #E94233
* Epoxy: Device has UL flammability classification 94V-O

DISCONTINUED-

"This series is replaced by the RS40XL series that meets to the same fit and function parameters.
The RS40XL series is preferred for PCB assembly."

RS-4L



Dimensions in inches and (millimeters)

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%.

MAXIMUM RATINGS (@ T_A=25 °C unless otherwise noted)

RATINGS	SYMBOL	MDA970G1	MDA970G2	MDA970G3	MDA970G5	MDA970G6	MDA970G8	MDA970G10	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 = 50°C	I_O	4.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150							Amps
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	10							°C/W
	$R_{\theta JA}$	28							
Typical Junction Capacitance (Note 3)	C_J	40							pF
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 150							°C

ELECTRICAL CHARACTERISTICS(@T_A=25 °C unless otherwise noted)

CHARACTERISTICS		SYMBOL	MDA970G1	MDA970G2	MDA970G3	MDA970G5	MDA970G6	MDA970G8	MDA970G10	UNITS
Maximum Instantaneous Forward Voltage at 6.28A DC		V_F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T_A = 25°C	I_R	5.0							μAmps
	@T_A = 100°C		100							

NOTES : 1. Thermal Resistance : Heat-sink case mounted or if PCB mounted.
2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".
3. Measureed at 1MHz and applied reverse voltage of 4.0 volts.

2007-5

RATING AND CHARACTERISTICS CURVES (MDA970G1 THRU MDA970G10)

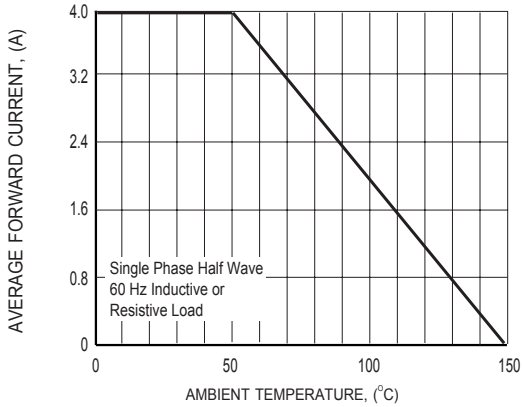


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

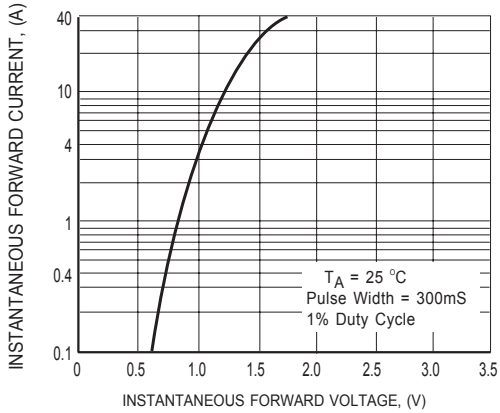


FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

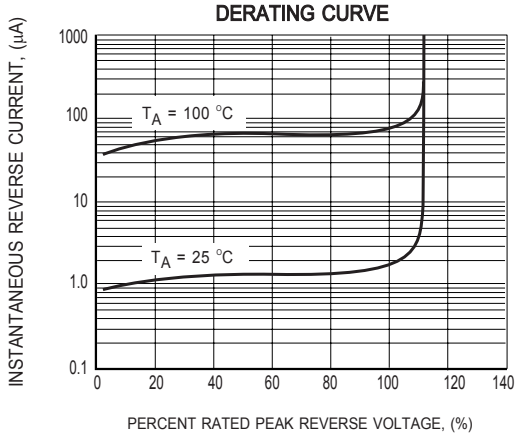


FIG.3 TYPICAL REVERSE CHARACTERISTICS

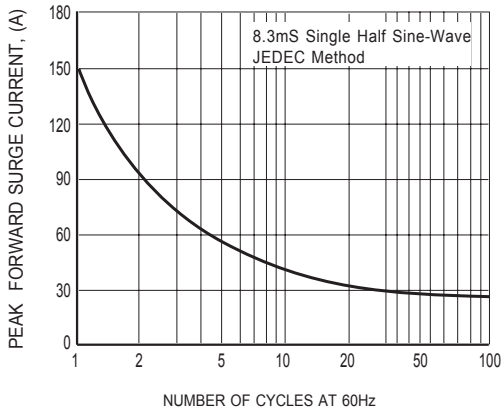


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT