

**SINGLE-PHASE GLASS PASSIVATED  
SILICON BRIDGE RECTIFIER**

**VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.0 Ampere**

**FEATURES**

- \* Low cost
- \* Low leakage
- \* Low forward voltage
- \* Mounting position: Any
- \* Weight: 1.26 grams

**MECHANICAL DATA**

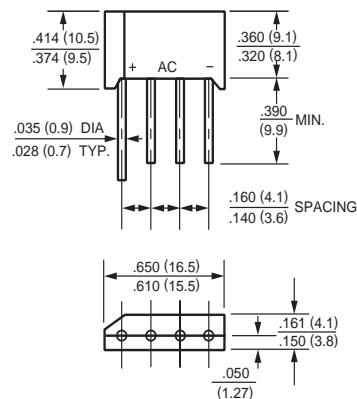
- \* UL listed the recognized component directory, file #E94233
- \* Epoxy: Device has UL flammability classification 94V-0

**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%.



**RS-1**



**MAXIMUM RATINGS** (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	MDA100G	MDA101G	MDA102G	MDA104G	MDA106G	MDA108G	MDA110G	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Output Current at TA = 75°C	Io	1.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	30							Amps
Typical Thermal Resistance from junction to case	R θJC	15							°C/W
Typical Thermal Resistance from junction to ambient	R θJA	50							
Operating Temperature Range	TJ	-55 to + 150							°C
Storage Temperature Range	TSTG	-55 to + 150							°C

**ELECTRICAL CHARACTERISTICS** (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	MDA100G	MDA101G	MDA102G	MDA104G	MDA106G	MDA108G	MDA110G	UNITS
Maximum Forward Voltage Drop per Bridge Element at 1.57A DC	VF	1.3							Volts
Maximum Reverse Current at Rated	IR	5.0							uAmps
DC Blocking Voltage per element		1							mAmps

Note: "Fully ROHS compliant", "100% Sn plating (Pb-free)."

2005-3

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# RATING AND CHARACTERISTIC CURVES ( MDA100G THRU MDA110G )

FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

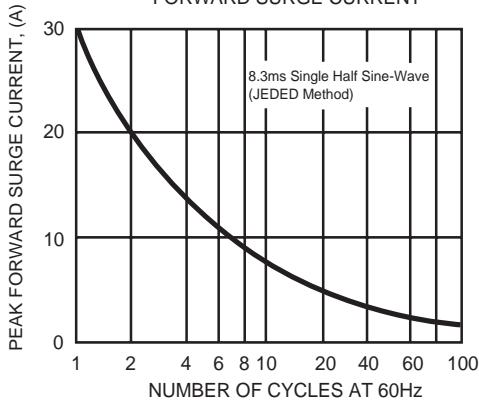


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

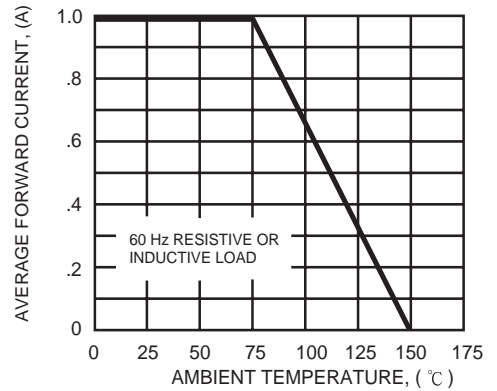


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

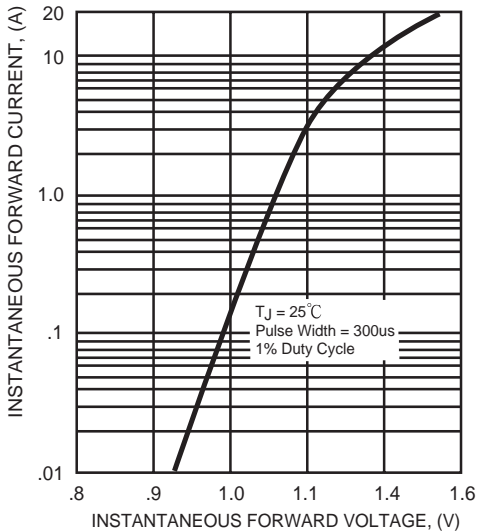


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

