

**SINGLE-PHASE GLASS PASSIVATED  
SILICON BRIDGE RECTIFIER**  
VOLTAGE RANGE 100 to 1000 Volts CURRENT 1.0 Ampere

**FEATURES**

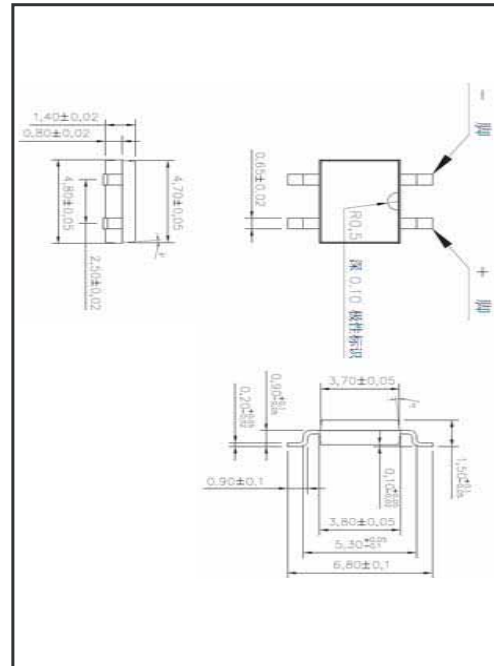
- \* Surge overload rating - 35 amperes peak
- \* Ideal for printed circuit board
- \* Reliable low cost construction utilizing molded
- \* Glass passivated device

**MECHANICAL DATA**

- \* Epoxy: Device has UL flammability classification 94V-O
- \* Mounting position: Any
- \* Polarity symbols molded on body

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.  
resistive or inductive load.



MAXIMUM RATINGS (At  $T_A = 25^\circ\text{C}$  unless otherwise noted)

RATINGS	SYMBOL	MD1F	MD2F	MD4F	MD6F	MD8F	MD10F	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage	$V_{RMS}$	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	100	200	400	600	800	1000	Volts
Maximum Average Forward Output Current at $T_A = 40^\circ\text{C}$	$I_O$	1.0						Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	35						Amps
Typical Current Squared Time	$I^2t$	5						$\text{A}^2\text{S}$
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	76						$^\circ\text{C}/\text{W}$
	$R_{\theta JL}$	20						
Operating and Storage Temperature Range	$T_{J,TSTG}$	-55 to + 150						$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS (At  $T_A = 25^\circ\text{C}$  unless otherwise noted)

CHARACTERISTICS	SYMBOL	MD1F	MD2F	MD4F	MD6F	MD8F	MD10F	UNITS
Maximum Forward Voltage Drop per Bridge Element at 0.5A DC	$V_F$	1.0						Volts
Maximum Reverse Current at Rated DC Blocking Voltage per element	@ $T_A = 25^\circ\text{C}$	1.0						$\mu\text{Amps}$
	@ $T_A = 150^\circ\text{C}$	200						$\mu\text{Amps}$

Note: 1. "ROHS compliant".  
2. Thermal Resistance: PCB mounted.

2021-12/08  
REV:E

## RATING AND CHARACTERISTICS CURVES ( MD1F THRU MD10F )

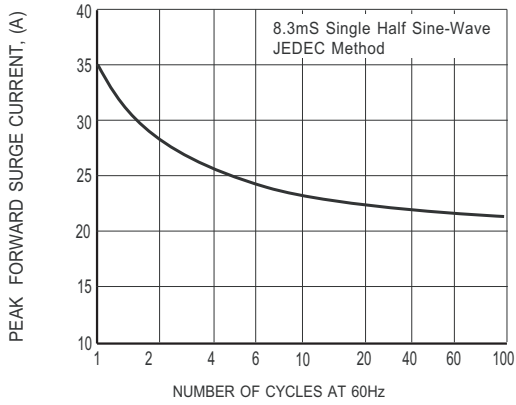


FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

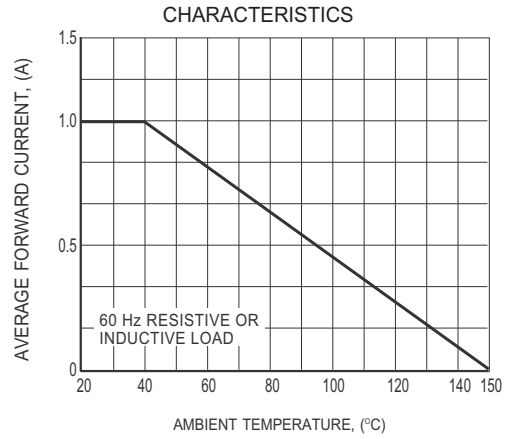
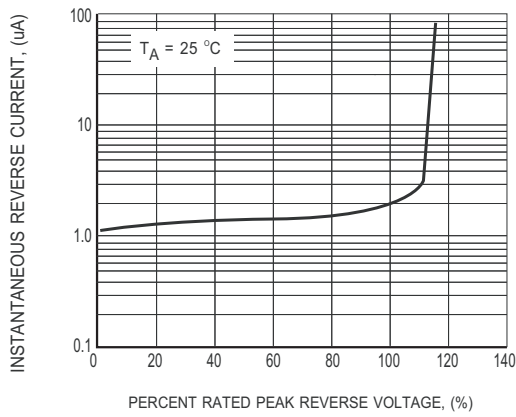
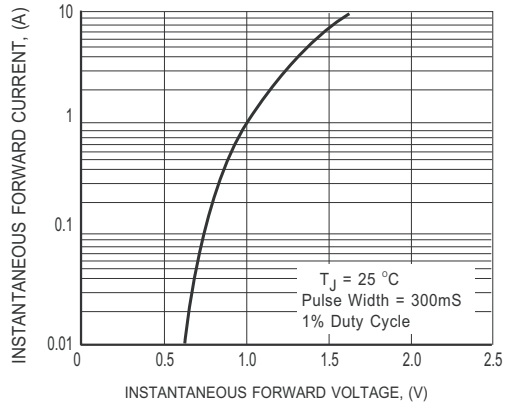


FIG.4 TYPICAL FORWARD CURRENT



