

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

FEATURES

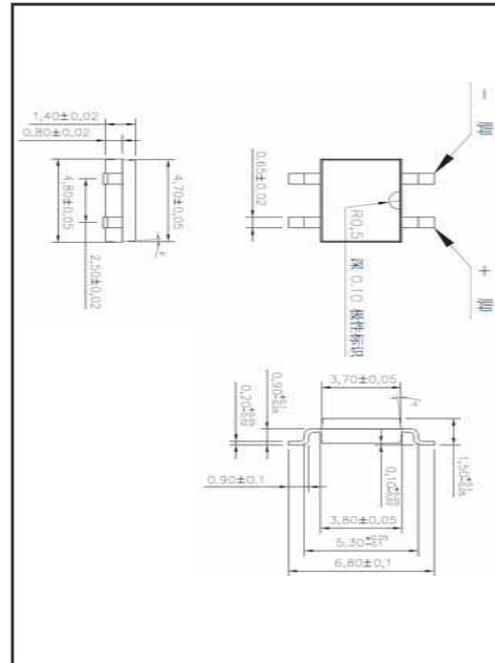
- * Surge overload rating - 35 amperes peak
- * Ideal for printed circuit board
- * Reliable low cost construction utilizing molded
- * Glass passivated device
- * P/N suffix V means AEC-Q101 qualified, e.g:MD1FV
- * P/N suffix V means Halogen-free

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						A^2S
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, T_{STG}	-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						μAmps
	@ $T_A = 150^\circ\text{C}$	200						μAmps

Note: 1. "Fully ROHS compliant", "100% Sn plating(Pb-free).
2. Thermal Resistance: PCB mounted.

2018-01/ 08
REV:D

RATING AND CHARACTERISTICS CURVES (MD1F THRU MD10F)

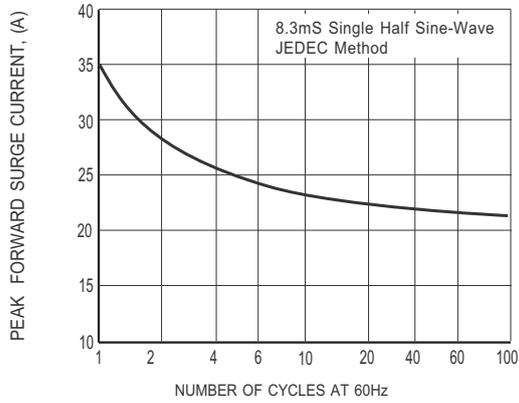
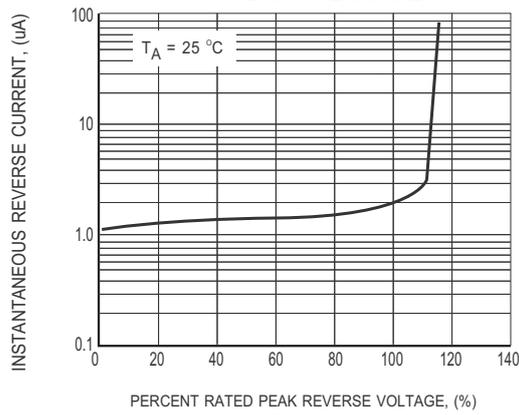
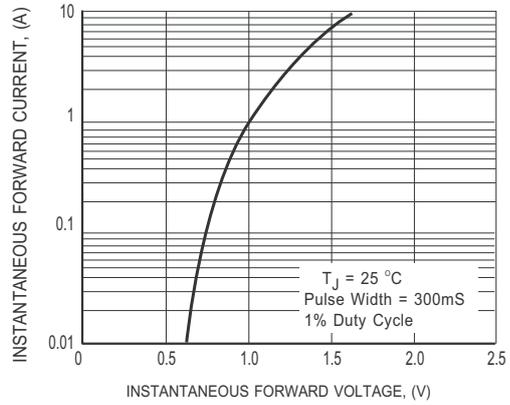


FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



CHARACTERISTICS

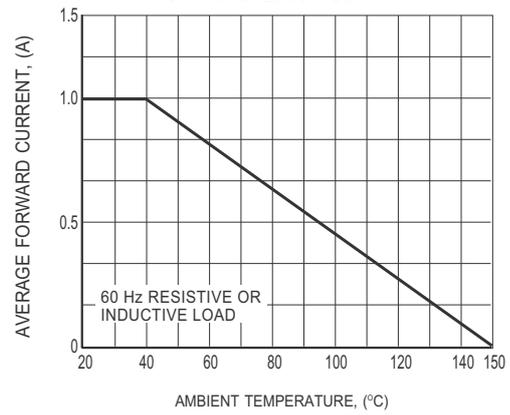


FIG.4 TYPICAL FORWARD CURRENT



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