

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

FEATURES

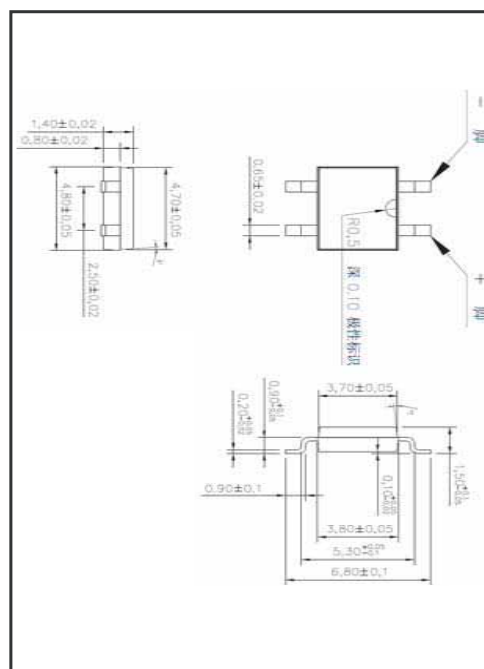
- * Surge overload rating - 35 amperes peak
- * Ideal for printed circuit board
- * Reliable low cost construction utilizing molded
- * Glass passivated device
- * P/N suffix V means AEC-Q101 qualified, e.g:MD1FV
- * P/N suffix V means Halogen-free

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°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 ² t	5						A ² S
Typical Thermal Resistance (Note 2)	R _{θJA}	76						°C/W
	R _{θJL}	20						
Operating and Storage Temperature Range	T _J ,T _{STG}	-55 to + 150						°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	I_R	1.0						μAmps
DC Blocking Voltage per element		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)

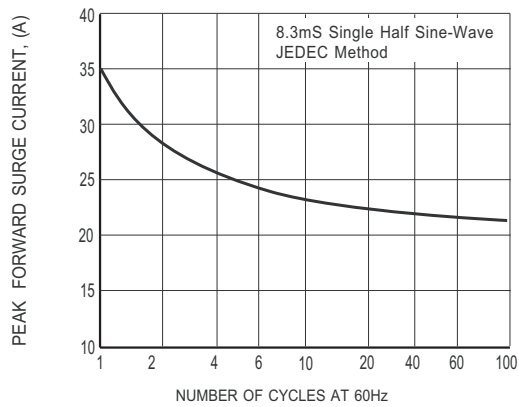


FIG. 1 - MAXIMUM NON-REPETITIVE
FORWARD SURGE CURRENT

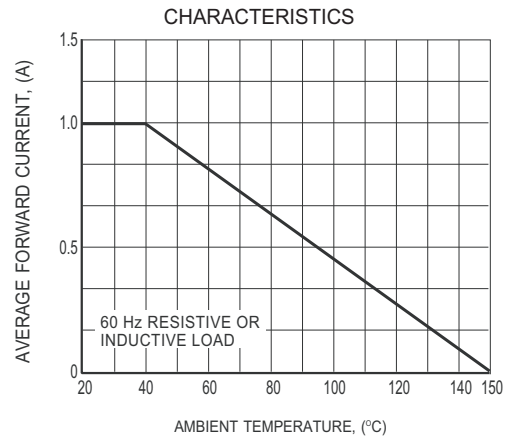
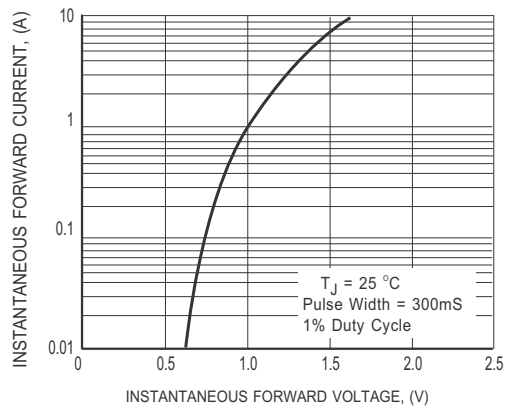
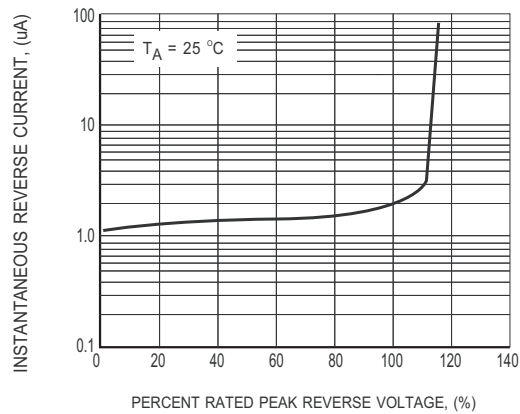


FIG.4 TYPICAL FORWARD CURRENT



Marking Description

Part No. → **M D X F**

↑ Voltage-code

1-----	100V	6-----	600V
2-----	200V	8-----	800V
4-----	400V	10-----	1000V

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