

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

FEATURES

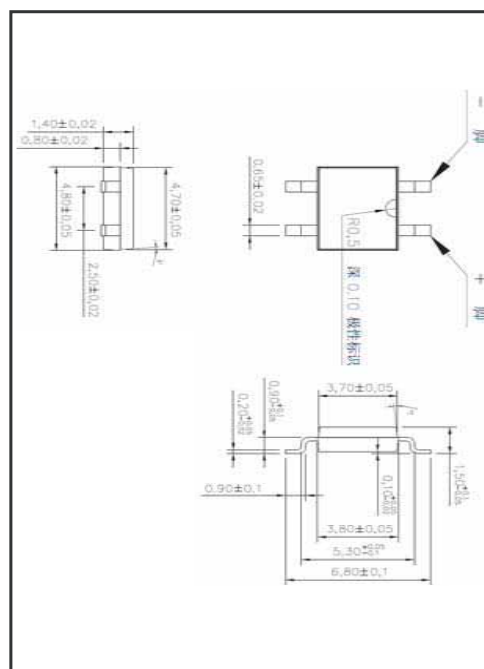
- * Surge overload rating - 35 amperes peak
- * Ideal for printed circuit board
- * Reliable low cost construction utilizing molded
- * Glass passivated device
- * P/N suffix V means AEC-Q101 qualified, e.g:MD1FV
- * P/N suffix V means Halogen-free

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)

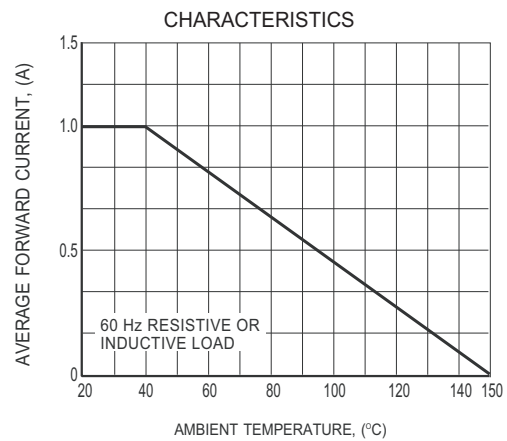
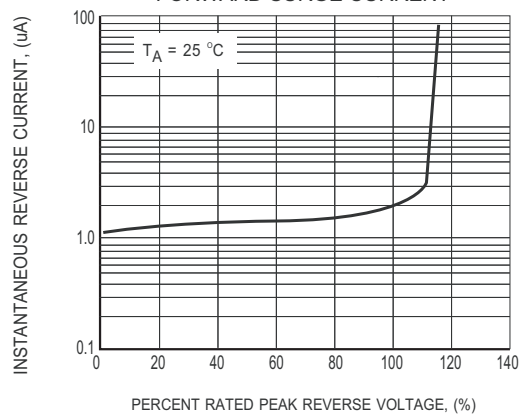
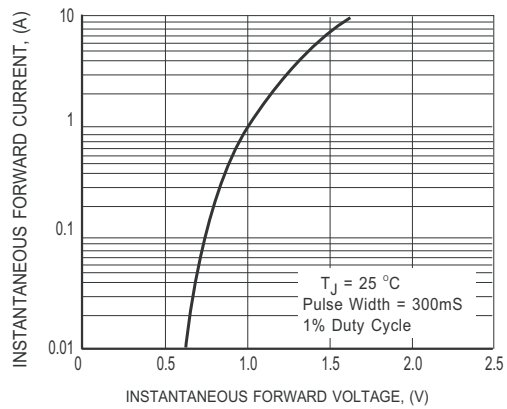
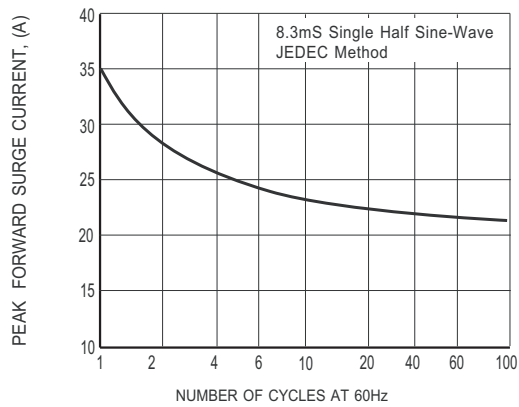


FIG.4 TYPICAL FORWARD CURRENT

Marking Description

Part No. → **M D X F**

↑ Voltage-code

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

DISCLAIMER NOTICE

Rectron Inc reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Rectron Inc or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on RECTRON data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Rectron Inc does not assume any liability arising out of the application or use of any product or circuit.

Rectron products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Rectron Inc. Customers using or selling Rectron components for use in such applications do so at their own risk and shall agree to fully indemnify Rectron Inc and its subsidiaries harmless against all claims, damages and expenditures.



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Rectron:](#)

[MD2F](#) [MD5F](#) [MD3F](#) [MD1F](#) [MD4F](#) [MD7F](#) [MD6F](#)