RECTRON
SEMICONDUCTOR
TECHNICAL SPECIFICATION

MD1F THRU MD10F

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

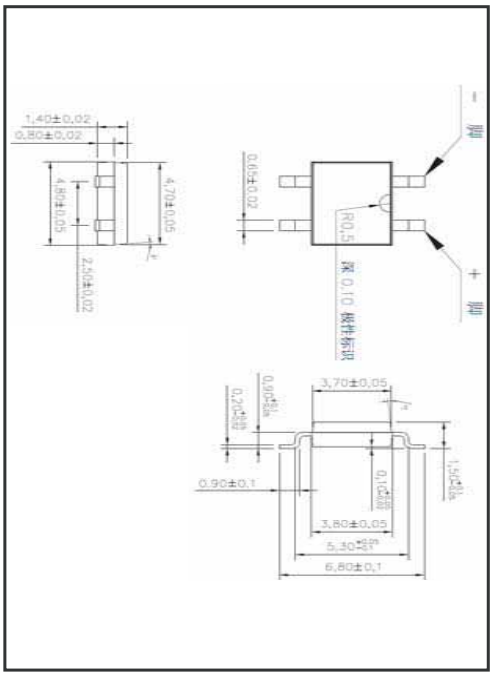
VOLTAGE RANGE 100 to 1000 Volts CURRENT 1.0 Ampere

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°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 Squarad Time	I^2t	5						A^2S
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	76						°C/W
	$R_{\theta JL}$	20						
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to + 150						°C

ELECTRICAL CHARACTERISTICS (At T_A = 25°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°C	I_R	1.0						uAmps
	@T_A = 150°C		200						uAmps

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

2021-12/08
REV:E

RATING AND CHARACTERISTICS CURVES (MD1F THRU MD10F)

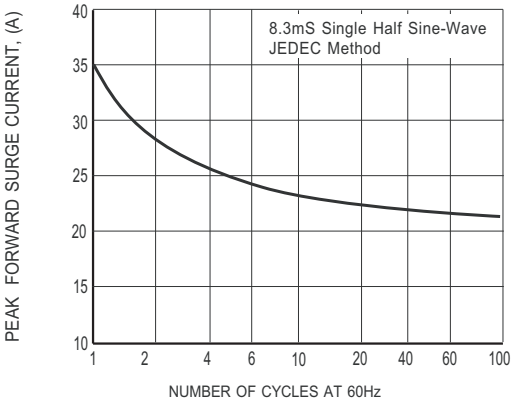
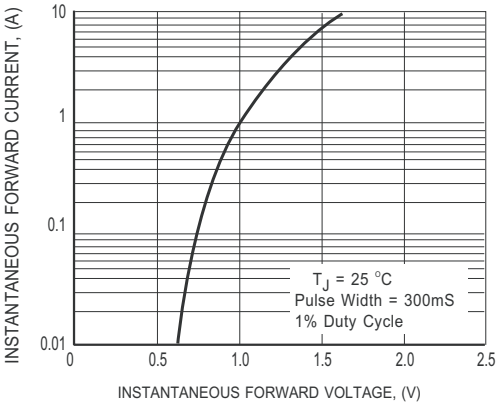
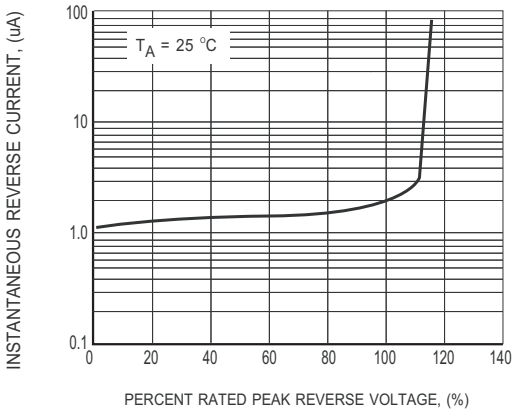


FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



CHARACTERISTICS



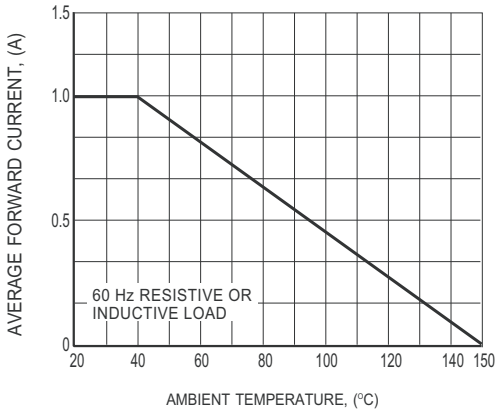
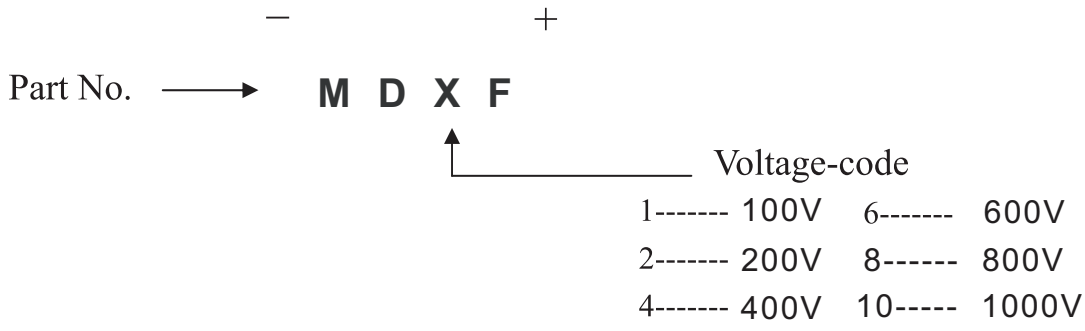


FIG.4 TYPICAL FORWARD CURRENT

Marking Description



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