MD1S~MD10S

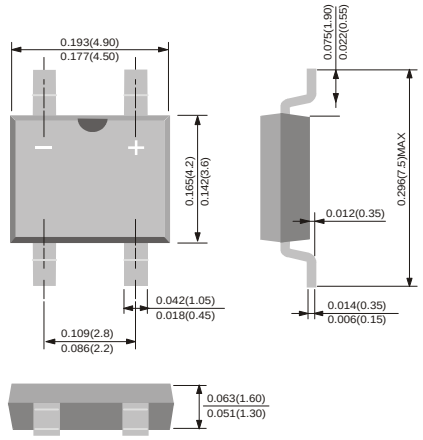
BRIDGE RECTIFIER

VOLTAGE 100 to 1000Volts CURRENT 0.8 Amperes

Green

MBF

Unit : inch(mm)



FEATURES

- Plastic material used carries Underwriters Laboratory recognition 94V-O
- Low leakage
- Surge overload rating-- 30 amperes peak
- Ideal for printed circuit board
- Exceeds environmental standards of MIL-S-19500
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case: Reliable low cost construction utilizing molded plastic technique results in
- inexpensive product
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- Polarity: Polarity symbols molded or marking on body
- Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, Resistive or inductive load.
For capacitive load, derate current by 20%

PARAMETER	SYMBOL	MD1S	MD2S	MD4S	MD5S	MD8S	MD10S	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_R	100	200	400	600	800	1000	V
Maximum Average Forward Current T_A=55°C T_A=25°C	$I_{F(AV)}$	0.8						A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30						A
Power Dissipation at T_A=25°C	P_D	1.4						W
I^2t Rating for fusing (t<8.35ms)	I^2t	3.735						A^2S
Maximum Forward Voltage Drop per Bridge Element at 0.5A	V_F	1.0						V
Maximum DC Reverse Current at Rated DC Blocking Voltage T_J=25 °C T_J=125 °C	I_R	10.0 500						μA
Typical Junction capacitance (Note 1)	C_J	25						pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	85 20						°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150						°C

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Thermal resistance from junction to ambient mounted mounted on 5cmX6cm P.C.B. with minimum copper pads.

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RATING AND CHARACTERISTIC CURVES

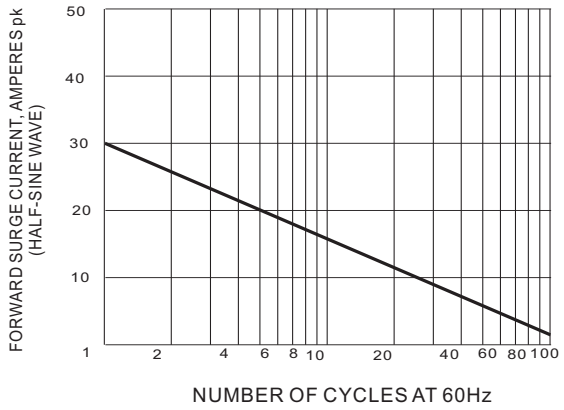

Fig.1 MAXIMUM NON-REPETITIVE SURGE CURRENT

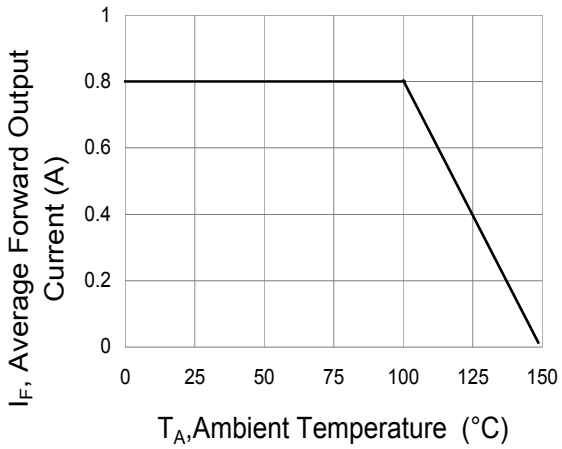

Fig.2 Derating Curve For Output Rectified Current

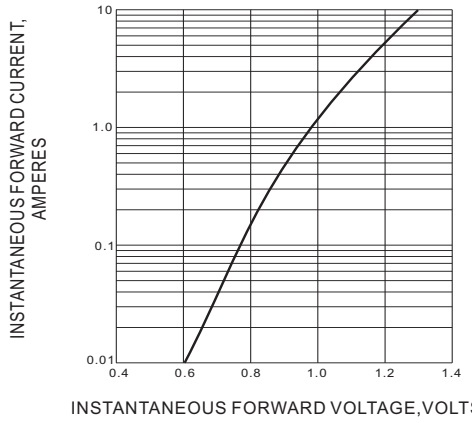

Fig.3 TYPICAL FORWARD CHARACTERISTICS

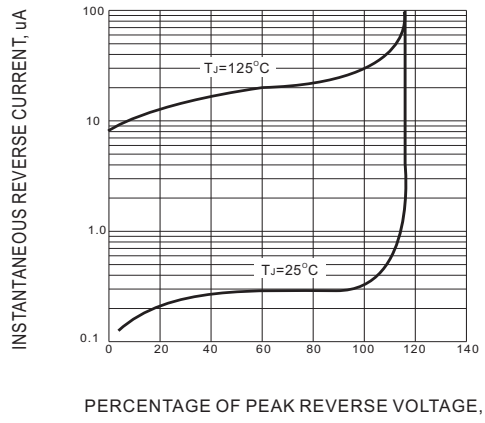

Fig.4 TYPICAL REVERSE CHARACTERISTICS