

# MD12

**SINGLE PHASE GLASS PASSIVATED  
SURFACE MOUNT BRIDGE RECTIFIER**  
**VOLTAGE: 1200V** **CURRENT: 0.8A**

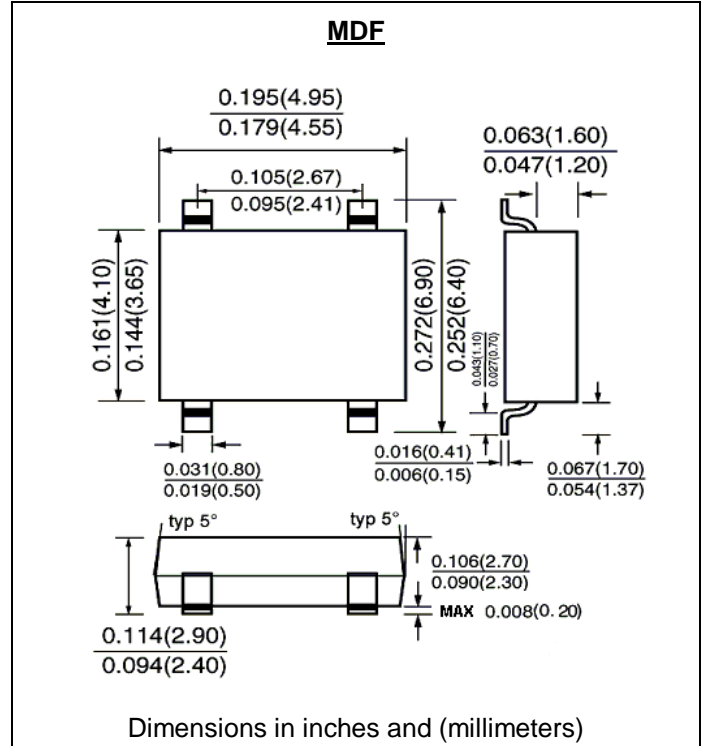


## FEATURE

For surface mount application  
Reliable low cost construction utilizing molded plastic  
Technique  
Surge overload rating: 30A peak

## MECHANICAL DATA

Terminal: Plated leads solderable per J-STD-002  
Case: UL-94 Class V-0 recognized Flame Retardant Epoxy  
Polarity: Polarity symbol marked on body  
Mounting position: any



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	MD12	Units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	1200	V
Maximum RMS Voltage	V <sub>rms</sub>	840	V
Maximum DC blocking Voltage	V <sub>DC</sub>	1200	V
Maximum Average Forward Rectified Current at T <sub>a</sub> =40°C	I <sub>f(av)</sub>	0.8	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	30.0	A
Maximum Instantaneous Forward Voltage at forward current 0.4A	V <sub>f</sub>	1.0	V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I <sub>r</sub>	5.0 500.0	μA
Typical Junction Capacitance	C <sub>j</sub>	15.0	Pf
Operating Junction Temperature Range	T <sub>j</sub>	-55 to +150	°C
Storage Temperature Range	T <sub>stg</sub>	-55 to +150	°C

Note:

1. Measured at 1.0 MHz and applied voltage of 4.0 volt

RATINGS AND CHARACTERISTIC CURVES MD12

FIG.1 - FORWARD CURRENT DERATING CURVE

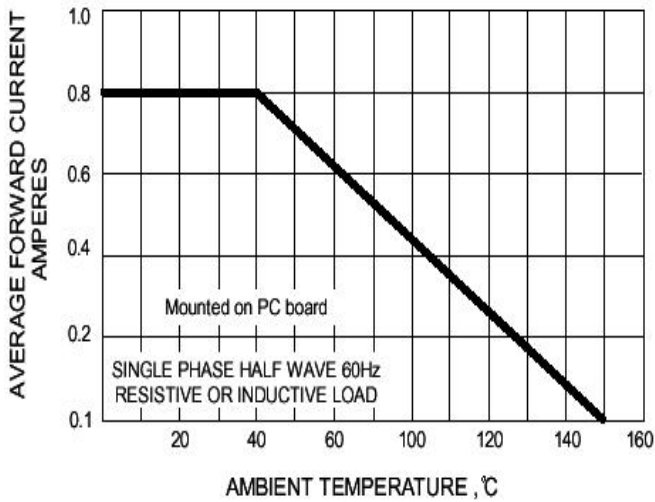


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

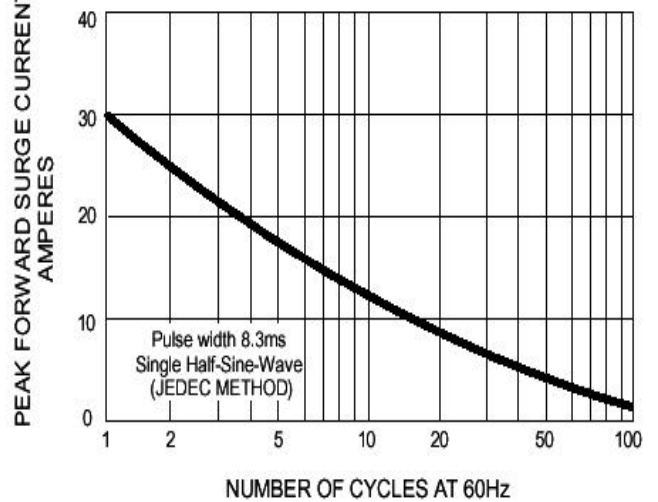


FIG.3 - TYPICAL JUNCTION CAPACITANCE

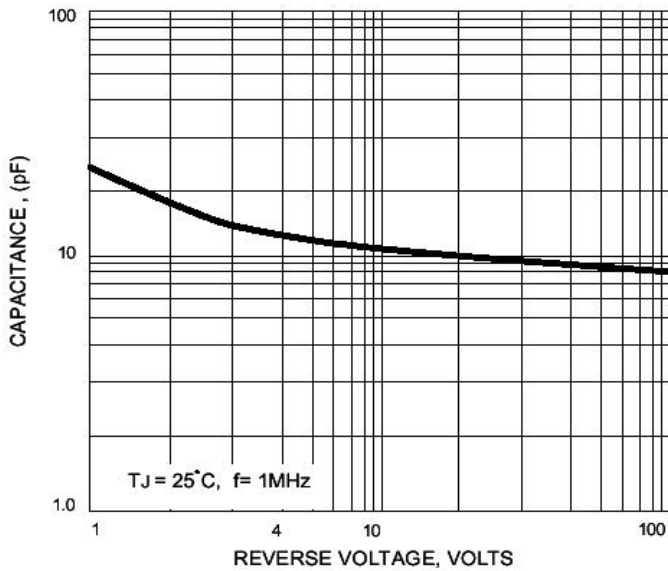


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

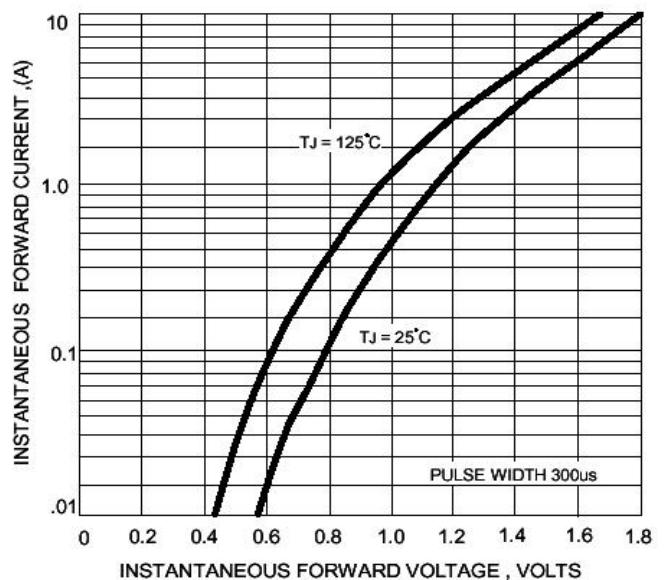


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

