

MD005 THRU MD10

**SINGLE PHASE GLASS
PASSIVATED SURFACE MOUNT BRIDGE
RECTIFIER**
VOLTAGE:50 TO 1000V CURRENT:0.8A

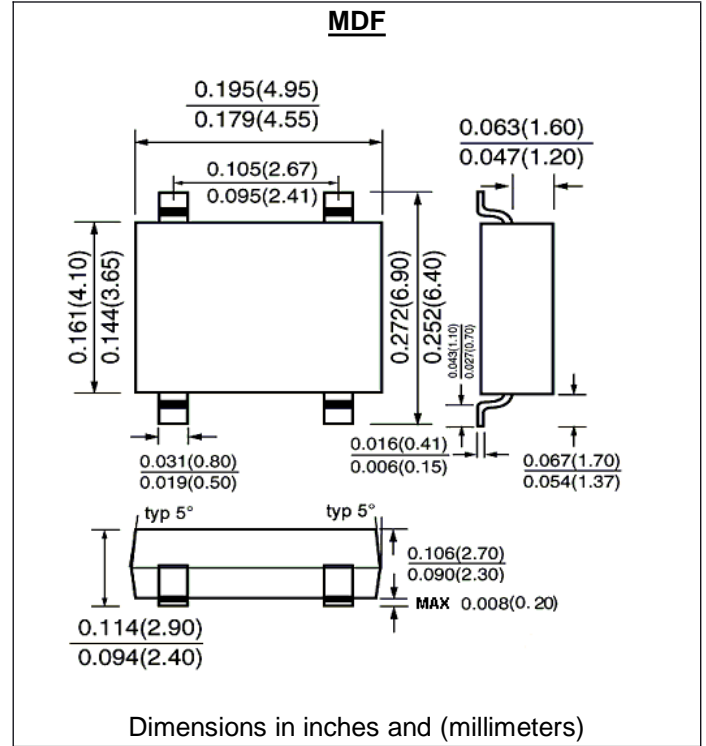


FEATURE

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

MECHANICAL DATA

Terminal: Plated leads solderable per
MIL-STD 202E, method 208C
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, for capacitive load, derate current by 20%)

	SYMBOL	MD 005	MD 01	MD 02	MD 04	MD 06	MD 08	MD 10	Units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{rms}	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at Ta =40°C	I _{f(av)}	0.8							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	30.0							A
Maximum Instantaneous Forward Voltage at forward current 0.4A	V _f	1.0							V
Maximum DC Reverse Current at rated DC blocking voltage	I _r	5.0 500.0							μA uA
Typical Junction Capacitance (Note1)	C _j	15.0							Pf
Typical Thermal resistance (Note2)	R _{th(ja)}	76							°C/W
(Note3)	R _{th(jl)}	20							
Operating Junction Temperature Range	T _j	-55 to +150							°C
Storage Temperature Range	T _{stg}	-55 to +150							°C

Note:

1. Measured at 1.0 MHz and applied voltage of 4.0 volt
2. On aluminum substrate
3. Junction to lead

RATINGS AND CHARACTERISTIC CURVES MD005 THRU MD10

FIG.1 - FORWARD CURRENT DERATING CURVE

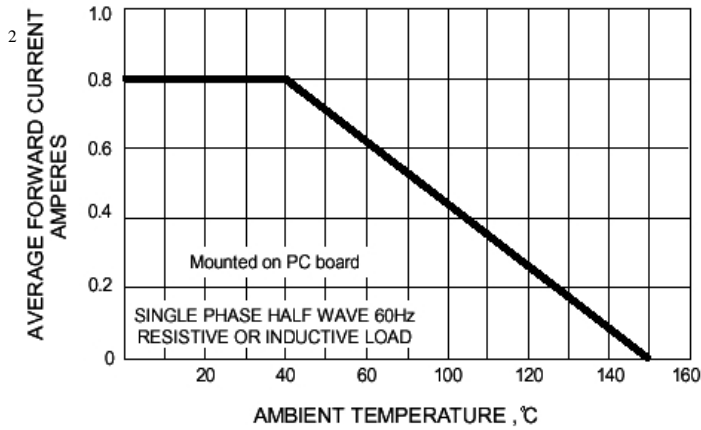


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

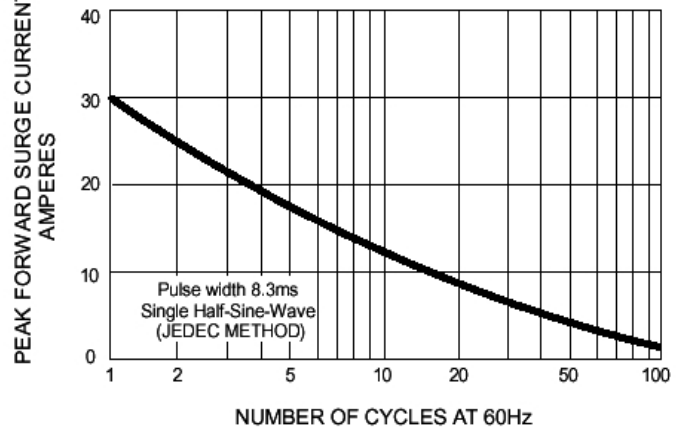


FIG.3 - TYPICAL JUNCTION CAPACITANCE

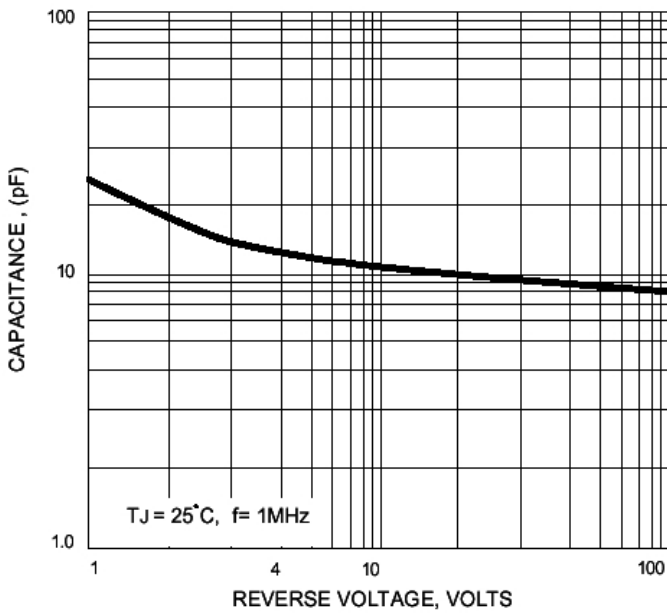


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

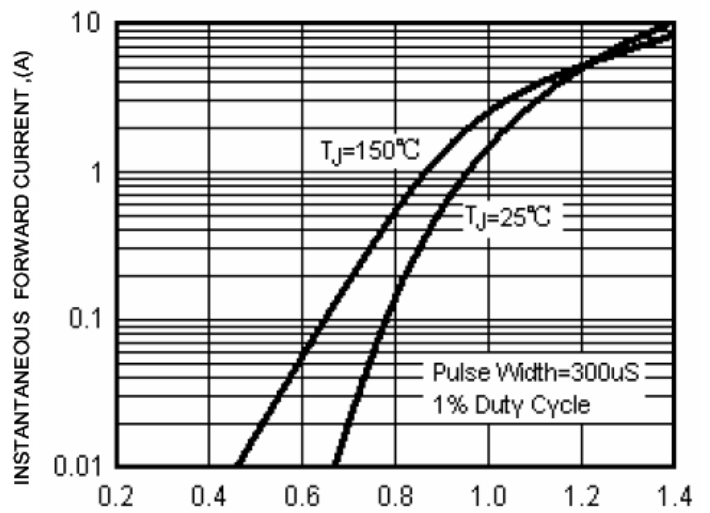


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

