

M1 THRU M7

SURFACE MOUNT
GENERAL PURPOSE PLASTIC RECTIFIER
VOLTAGE: 50 to 1000V **CURRENT: 1.0A**

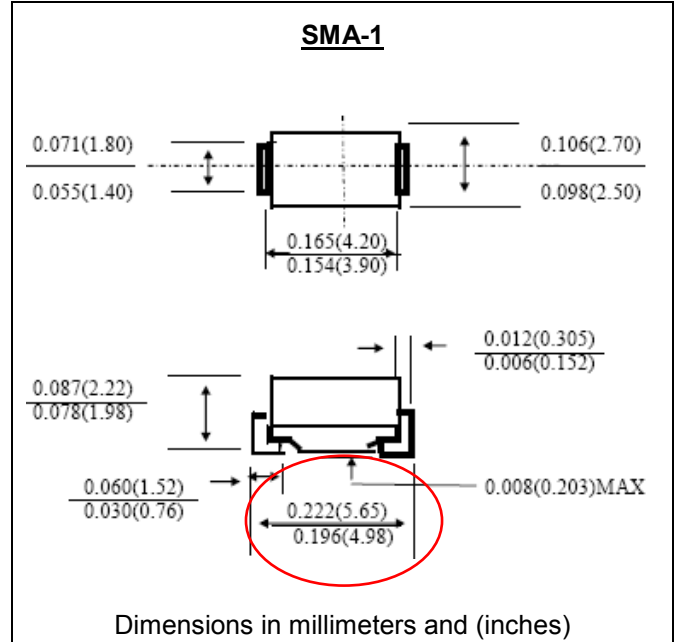


FEATURE

Low cost
 Diffused junction
 Low Leakage
 Low forward voltage drop
 High current capability

MECHANICAL DATA

Terminal: Plated axial leads solderable per MIL-STD 750, method 2026
 Case: Molded with UL-94 class V-0 recognized Flame Retardant Epoxy
 Polarity: color band denotes cathode
 Mounting position: any
 Weight: 0.093grams
 Marking: M1 M2 M3 M4 M5 M6 M7



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	M1	M2	M3	M4	M5	M6	M7	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 3/8" lead length at T _L = 110°C	I _{f(av)}	1.0							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 rated forward current	V _f	1.1							V
Maximum DC Reverse Current at rated DC blocking voltage	I _r	5.0 50.0							μA
Typical Junction Capacitance (Note 1)	C _j	15.0							pF
Typical Thermal Resistance (Note 2)	R _{th(ja)}	75.0							°C/W
Operating Junction Temperature Range	T _j	-55 to +125							°C
Storage Temperature Range	T _{stg}	-55 to +150							°C

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to Ambient

RATINGS AND CHARACTERISTIC CURVES M1 THRU M7

FIG. 1-- FORWARD CURRENT DERATING CURVE

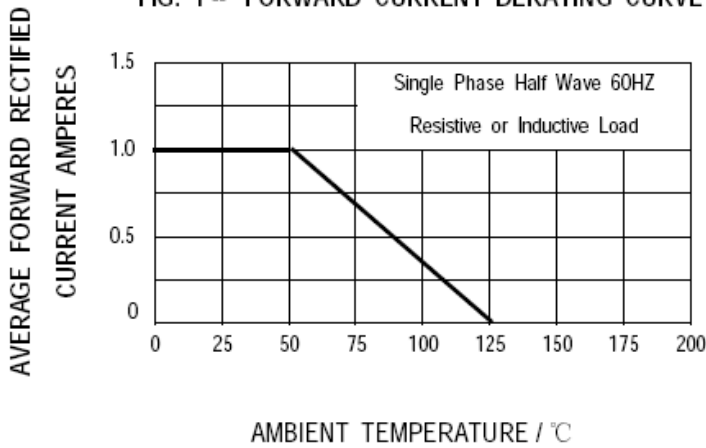


FIG. 2 -- PEAK FORWARD SURGE CURRENT

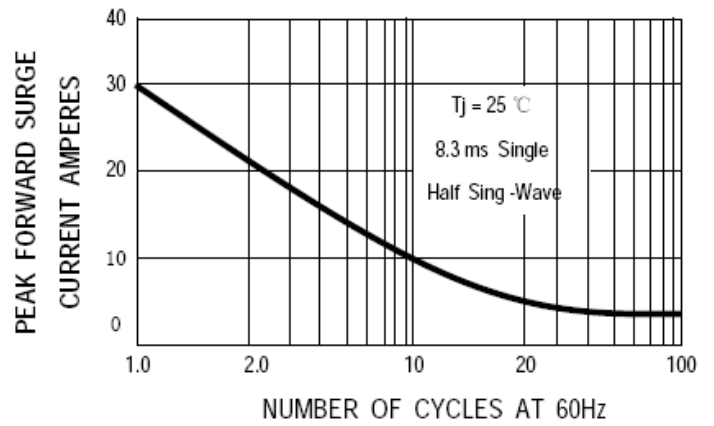


FIG. 3 -- TYPICAL FORWARD CHARACTERISTIC

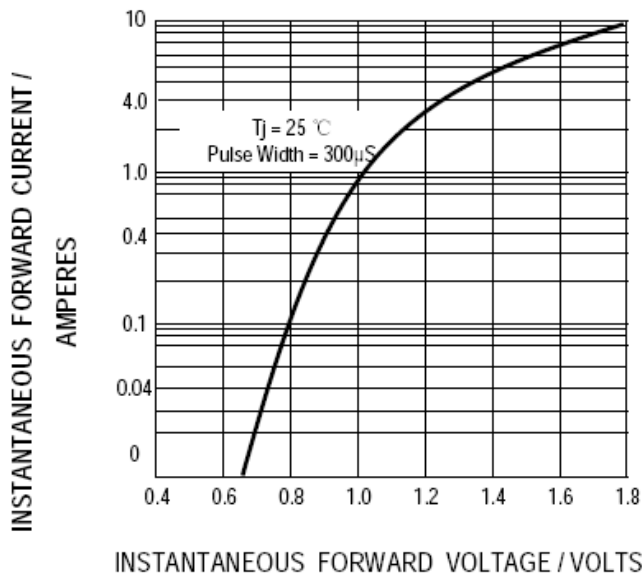


FIG. 4 -- TYPICAL REVERSE CHARACTERISTICS

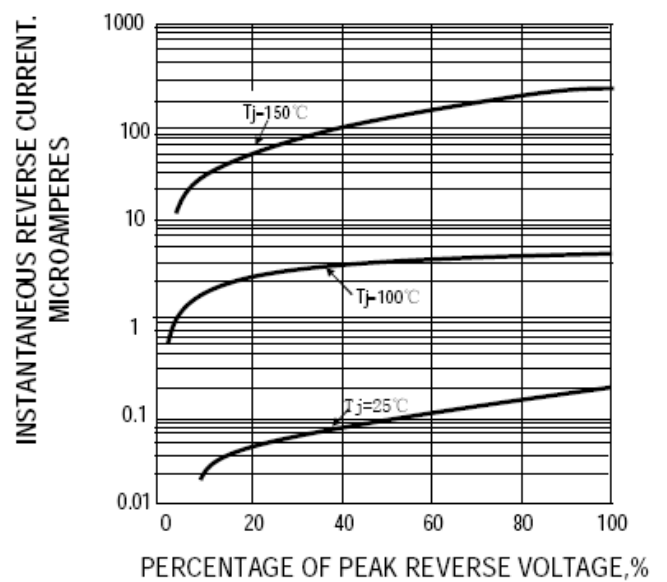


Fig.5 -- TYPICAL JUNCTION CAPACITANCE

