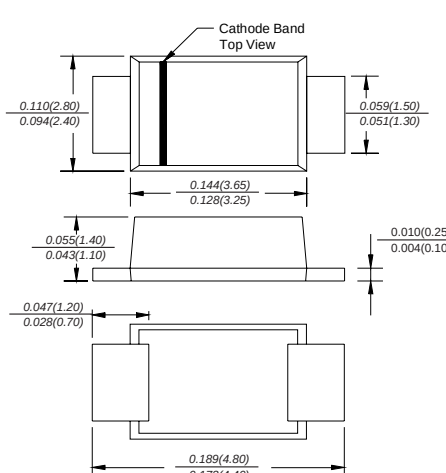
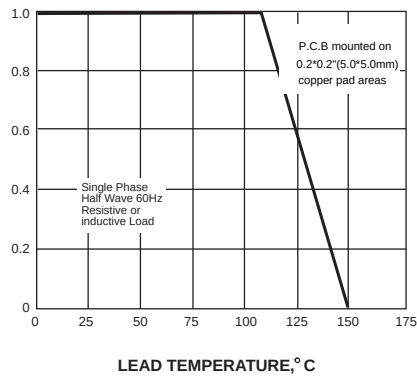


SURFACE MOUNT GENERAL RECTIFIER		Reverse Voltage - 50 to 1000 Volts Forward Current -1.0 Ampere							
SMAF  Dimensions in inches and (millimeters)		Features ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0 ◆ For surface mounted applications ◆ Low reverse leakage ◆ Built-in strain relief,ideal for automated placement ◆ High forward surge current capability ◆ High temperature soldering guaranteed: 260°C/10 seconds at terminals ◆ Glass passivated chip junction Mechanical Data Case: SMAF molded plastic body over passivated chip Terminals: Solder plated, solderable per MIL-STD-750, Method 2026 Polarity: Color band denotes cathode end Mounting Position: Any Weight:0.0014 ounce, 0.038 grams							
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 current derate by 20%.									
	SYMBOLS	M1F	M2F	M3F	M4F	M5F	M6F	M7F	UNITS
Maximum repetitive 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 T _L =110°C	I _(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 1.0A	V _F	1.1							V
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	5.0 50.0							μA
Typical junction capacitance (NOTE 1)	C _J	15.0							pF
Typical thermal resistance (NOTE 2)	R _{θJA}	88.0							°C/W
Operating junction and storage temperature range	T _J ,T _{STG}	-55 to +150							°C
Note: 1.Measured at 1MHz and applied reverse voltage of 4.0V D.C. 2.P.C.B. mounted with 0.2x0.2”(5.0x5.0mm) copper pad areas									

RATINGS AND CHARACTERISTIC CURVES M1F THRU M7F

AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



PEAK FORWARD SURGE CURRENT,
AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

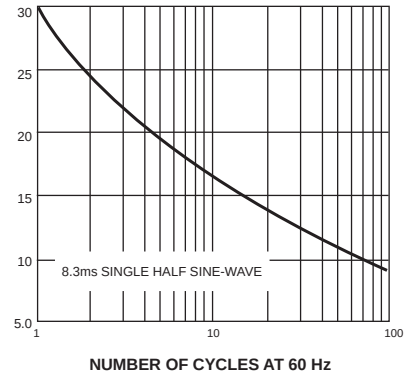
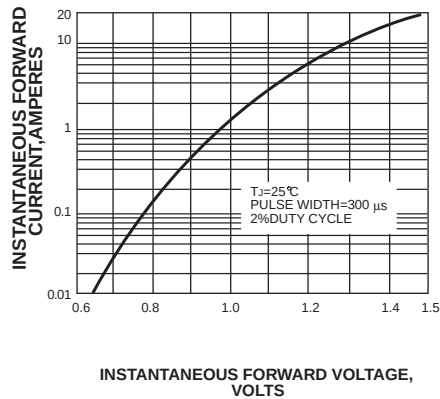


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT,
MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

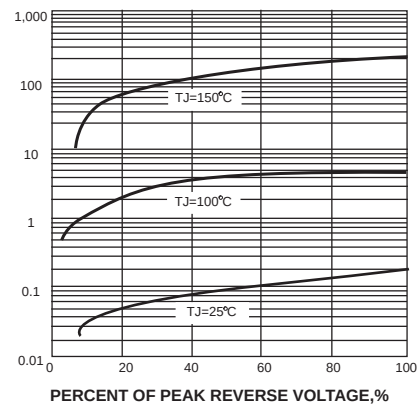
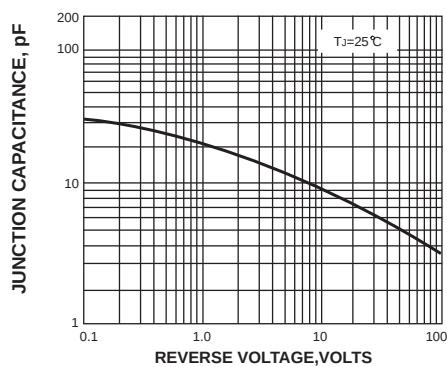


FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE,
°C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

