

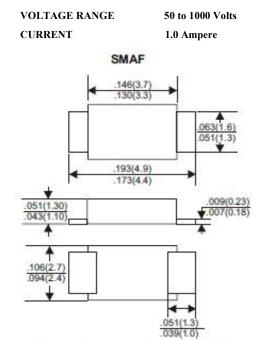
## **FEATURES**

- Ideal for surface mount applications
- · Easy pick and place
- · Built-in strain relief
- · High surge current capability

## **MECHANICAL DATA**

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Solder plated, solderable per MIL-STD-202F, method 208 guranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any

SYMBOLS	M1F	M2F	M3F	M4F	M5F	M6F	M7F
MARKING	M1F	M2F	M3F	M4F	M5F	M6F	M7F



Dimensions in inches and (millimeters)

## 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%

Catalog Number	SYMBOLS	M1F	M2F	M3F	M4F	M5F	M6F	M7F	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current . 375" (9.5mm) Lead Length at Ta=75°C	I <sub>F(AV)</sub>	1							Amps
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method) $T_L$ =90 $^{\circ}$ C	$I_{FSM}$	30						Amps	
Maximum Instantaneous Forward Voltage at 1.0A	$V_{\rm F}$	1.0						Volts	
Maximum DC Reverse Current at rated DC Blocking Voltage at $T_A = 25^{\circ}C$ $T_A = 100^{\circ}C$	$I_R$	5 50						μΑ	
Typical Junction Capacitance (Note 1)	$C_{\mathrm{J}}$	9						pF	
Typical Thermal Resistance RθJA (Note 2)	$R_{ heta JA}$	110					°C/W		
Operating and Storage Temperature Range	Tj,Tstg	-55 to +150						$^{\circ}$	

## **Notes:**

- 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
- 2. Thermal Resistance from Junction to Ambient.



#### FIG.1-TYPICAL FORWARD

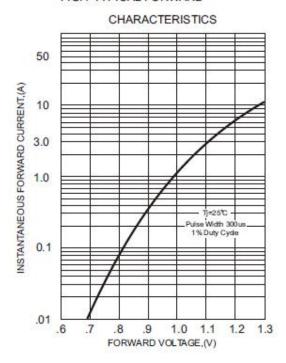
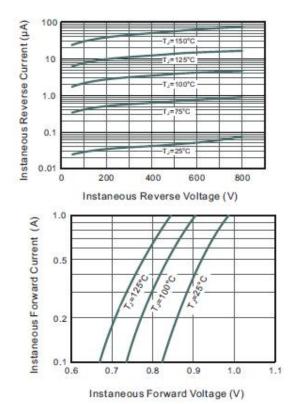
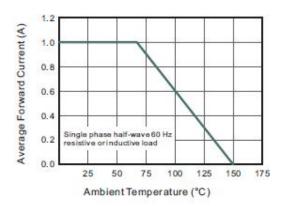


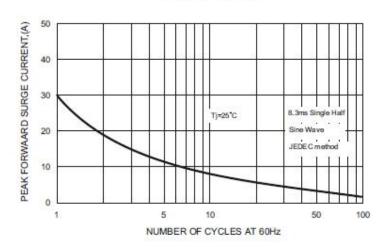
FIG.3 - TYPICAL REVERSE



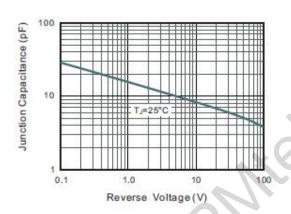
#### FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE



# FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



## FIG.5-TYPICAL JUNCTION CAPACITANCE



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