



## 1.0 AMP SURFACE MOUNT PASSIVATED RECTIFIERS

### Features

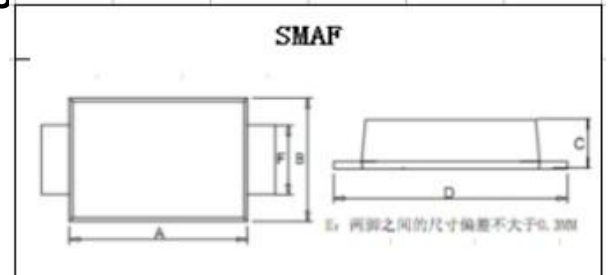
Glass passivated die construction  
 Ideal for surface mounted applications  
 Low reverse leakage  
 Plastic Case Material has UL Flammability  
 Classification Rating 94V-0

### Mechanical Data

Case Molded plastic SMAF  
 Terminals Plated leads solderable per  
 Mil-STD-750 Method 2026  
 Polarity Color band or Cathode Notch  
 Mounting Position Any  
 Making Type Number

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified  
 Single phase, half wave, 60Hz, resistive or inductive load  
 For capacitive load derate current by 20%



DIM	INC HES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.13	0.15	3.2	3.8	
B	0.09	0.11	2.3	2.7	
C	0.03	0.05	0.8	1.2	
D	0.16	0.2	4	5	
E	/	0.01	/	0.3	
F	0.04	0.08	1	2	

Type Number	SYMBOL	M1	M2	M3	M4	M5	M6	M7	Unit
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
Average Rectified Output Current @ $T_L=100^\circ C$	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	30							A
Forward Voltage @ $I_F=1.0A$	$V_{FM}$	1.1							V
Peak Reverse Current @ $T_A=25^\circ C$	$I_R$	5.0							uA
At Rated DC Blocking Voltage @ $T_A=125^\circ C$		100							
$I^2t$ Rating for fusing ( $t < 8.3ms$ )	$I^2t$	3.7							$A^2s$
Typical Junction Capacitance (Note 1)	$C_J$	12							pF
Typical Thermal Resistance Junction to Ambient(Note 2)	$R_{\theta JA}$	60							$^\circ C/W$
Operating Temperature Range	$T_J$	-55 to +150							$^\circ C$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ C$

Note: 1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

2. Thermal Resistance from Junction to lead mounted on P.C.B. with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas



FIG.1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

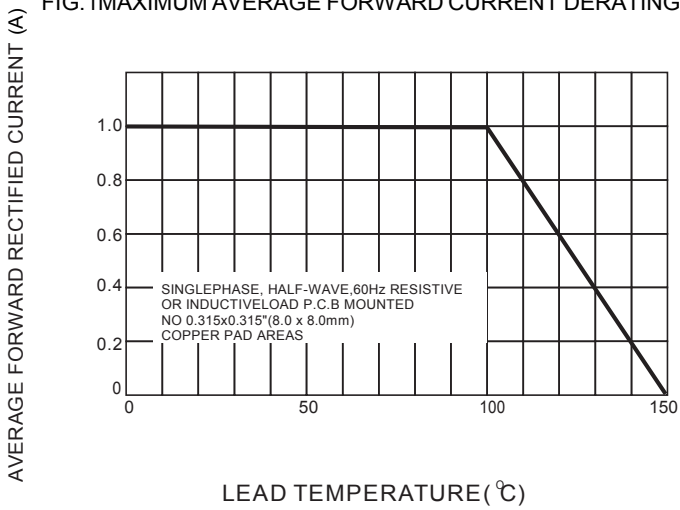


FIG.2 TYPICAL FORWARD CHARACTERISTICS

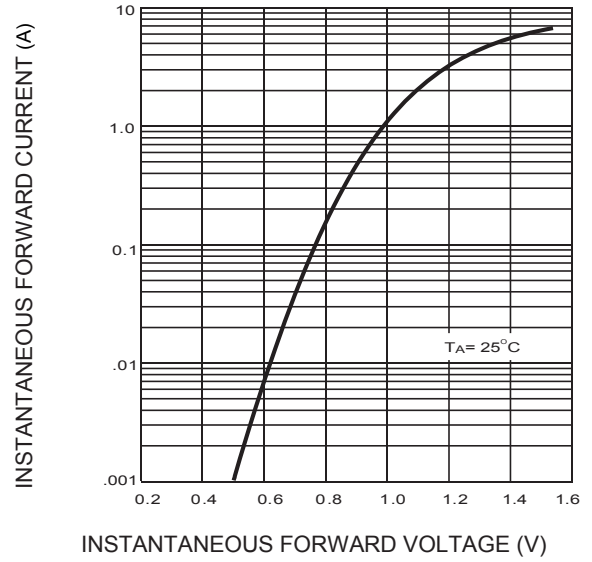


FIG.3 MAXIMUM NON-REPEITIVE SURGE CURRENT

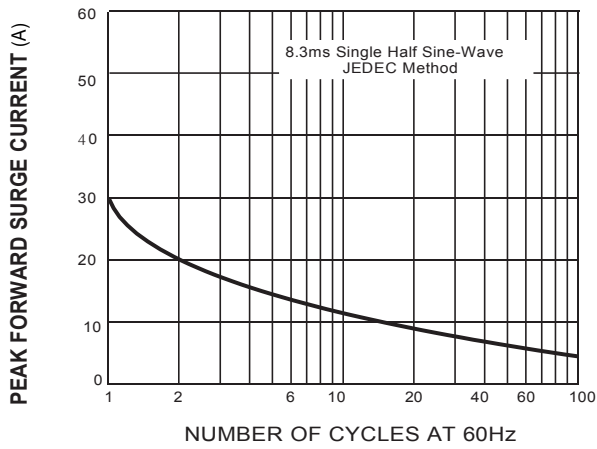
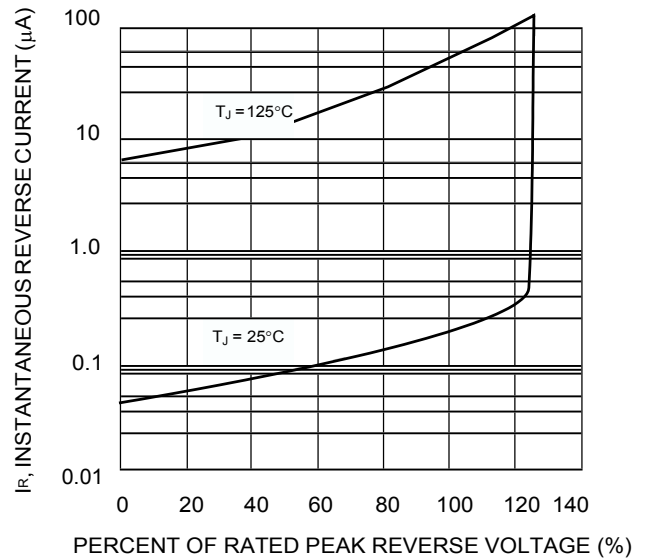


Fig. 4 Typical Reverse Characteristics (per element)

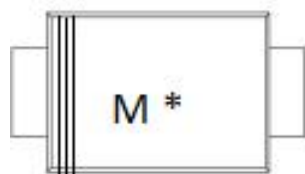




## MARKING INFORMATION



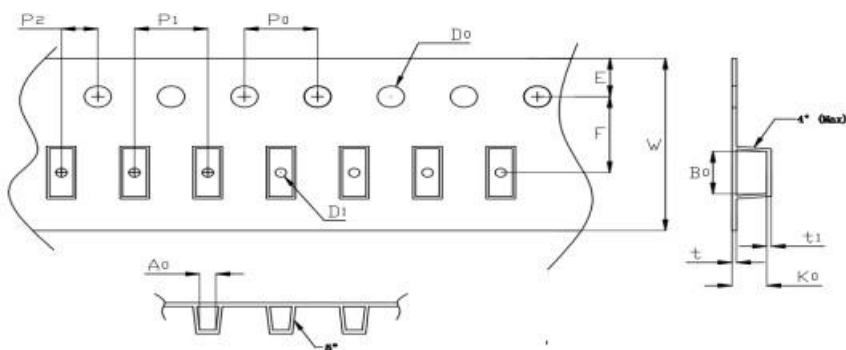
= Polar line



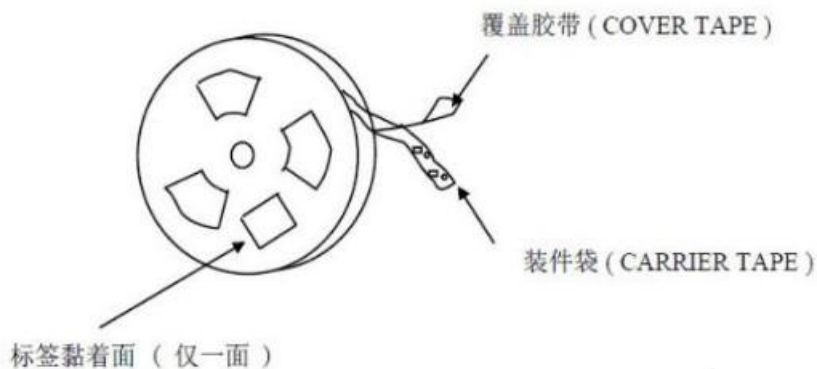
M\* = Marking Code

## PACKING REQUIRMENTS

- PS black anti-static carrier tape packing



Specifications	Carrier tape type	Ao	Bo	Ko	Po	W	t	Explain
SMAF	Anti-static	2.83±0.10	4.9±0.10	1.45±0.05	4.00±0.10	12.0±0.10	0.23±0.05	



DEVICE TYPE	Tape width	7" Reel		
		Q'TY/REEL (pcs)	BOX/CAR TOON	Q'TY/REEL (pcs)
SMAF	12mm	3000	64	192000



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