

## Features

- Low reverse leakage
- High forward surge capability
- High reliability
- High temperature soldering guaranteed:  
260°C/10seconds
- Lead and body according with RoHS standard
- Green compound with suffix "-F" on Marking



**SMAF**

## Mechanical Data

- Case:SMAF Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Pure tin plated, lead free

## Maximum Ratings & Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

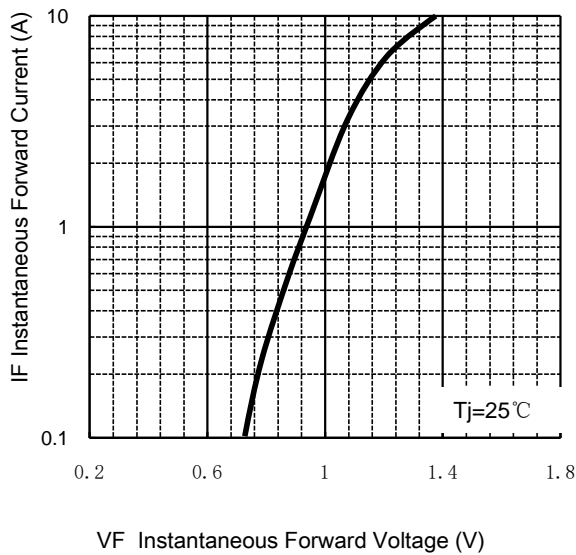
Parameter	Symbols	M1F	M2F	M3F	M4F	M5F	M6F	M7F	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	$I_{F(AV)}$	1.0							A
Non-repetitive peak forward surge current 8.3 ms singlehalf sine-wave	$I_{FSM}$	30							A
@ $I_F=1.0A$ Maximum forward voltage	$V_F$	1.1							V
@ $V_{DC}$ Maximum reverse current	$I_R$	5							$\mu A$
$T_A=25^{\circ}C$		100							
$T_A=125^{\circ}C$									
Typical thermal resistance (Note 1)	$R_{\theta JA}$	85							$^{\circ}C/W$
VR=4.0V,f=1MHz Type junction capacitance	$C_J$	12							pF
Operating junction and storage temperature rang	$T_J, T_{STG}$	-55 --- +150							$^{\circ}C$

Note:

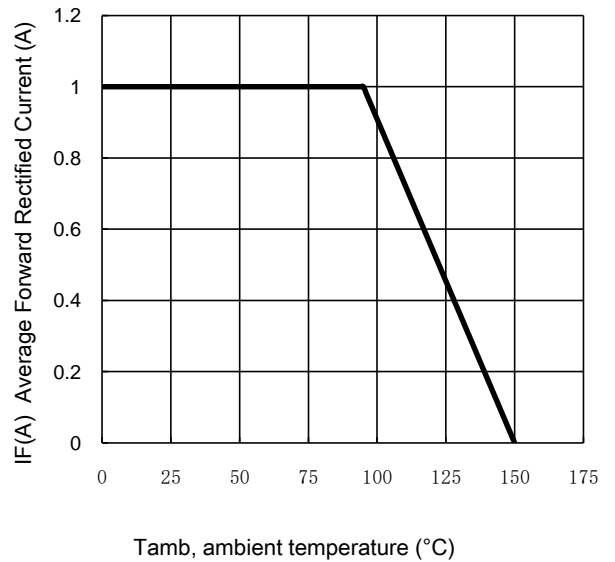
- 1) Thermal resistance from junction to ambient , PCB mounted.

## Characteristic Curves

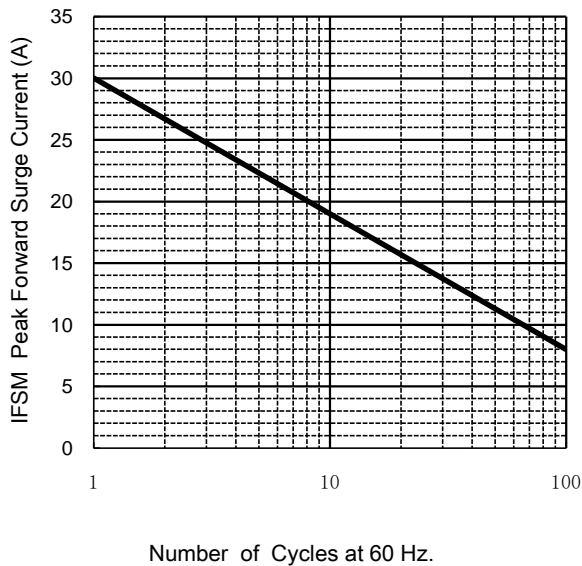
TYPICAL FORWARD CHARACTERISTIC



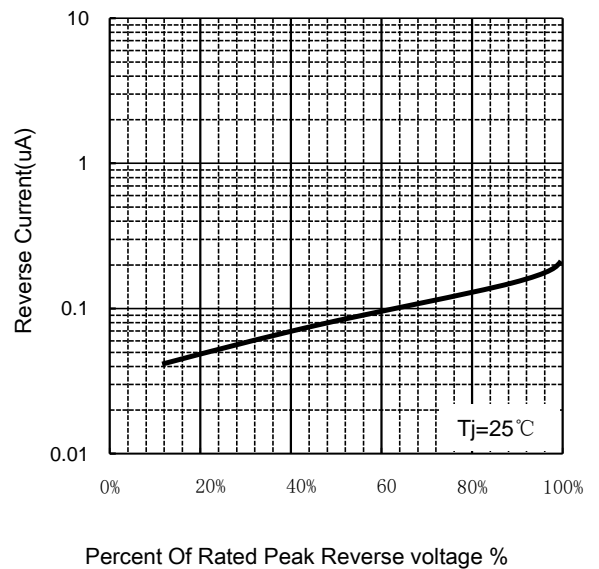
FORWARD CURRENT DERATING CURVE



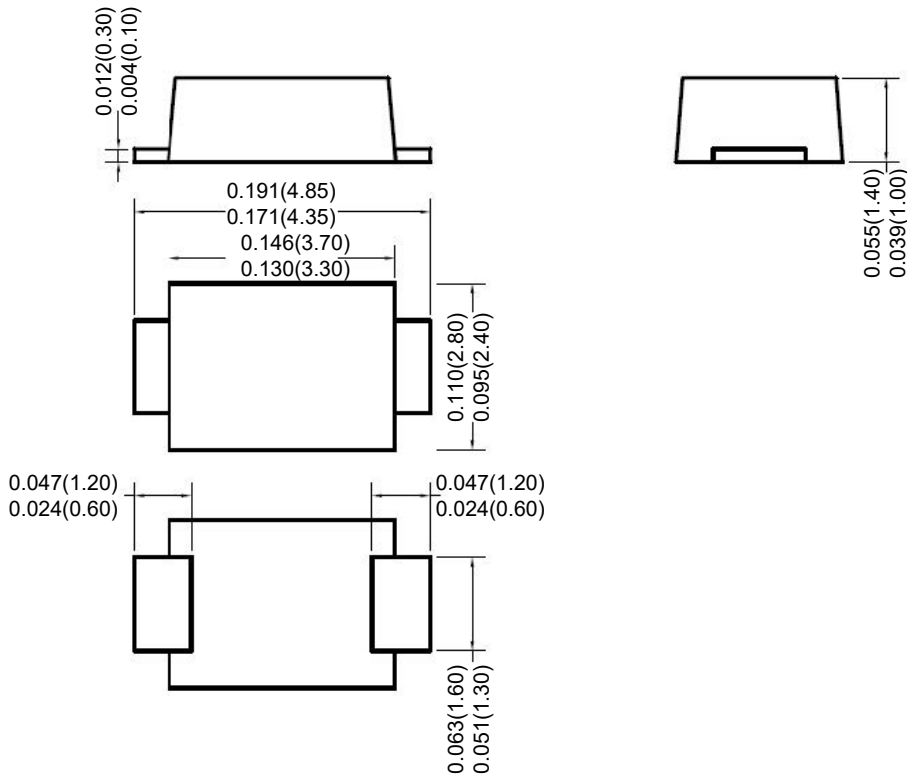
MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



Typical Reverse Characteristics



## Package Outline



## Package Information

Part Number	Component Package	Quantity	Packaging Option
M1F THRU M7F	SMAF	10000	Tape and reel-12mm tape/10" reel
M1F THRU M7F	SMAF	3000	Tape and reel-12mm tape/7" reel