

### 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.

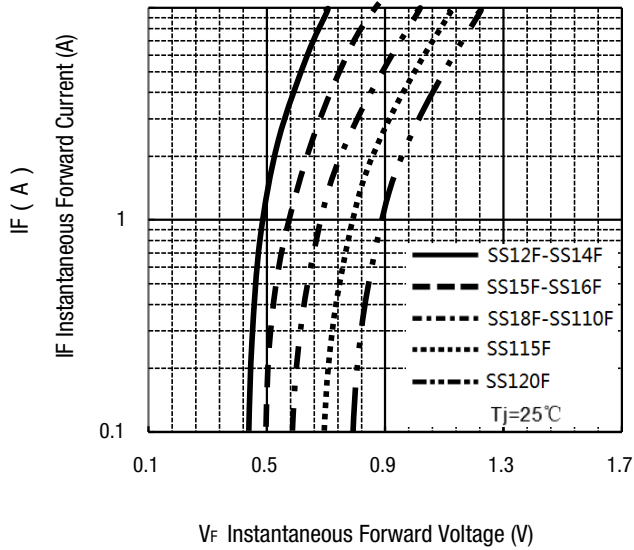
Parameter	Symbols	SS12F	SS13F	SS14F	SS15F	SS16F	SS18F	SS110F	SS115F	SS120F	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	100	150	200	V
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	56	70	105	140	V
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	100	150	200	V
Maximum average forward rectified current	$I_{F(AV)}$	1.0									A
Non-repetitive peak forward surge current 8.3 ms single half sine-wave	$I_{FSM}$	30									A
@ $I_F=1.0A$ Maximum forward voltage	$V_F$	0.55			0.70		0.85		0.92	0.95	V
@ $V_{DC}$ $T_A=25^{\circ}C$ Maximum reverse current	$I_R$	500					100				$\mu A$
$T_A=100^{\circ}C$		20					10				mA
Typical thermal resistance (Note 1)	$R_{\theta JA}$	85									$^{\circ}C/W$
$V_R=4.0V, f=1MHz$ Type junction capacitance	$C_J$	90									pF
Operating junction temperature rang	$T_J$	-55 --- +125					-55 --- +150				$^{\circ}C$
Storage temperature rang	$T_{STG}$	-55 --- +150									$^{\circ}C$

Note:

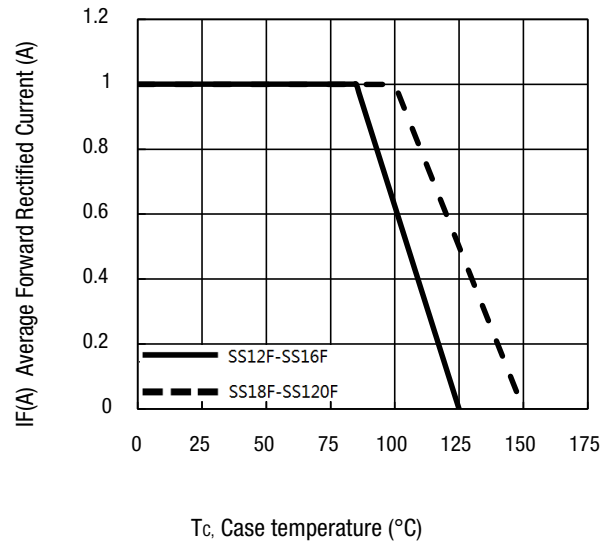
1) Thermal resistance from junction to ambient, PCB mounted.

## Characteristic Curves

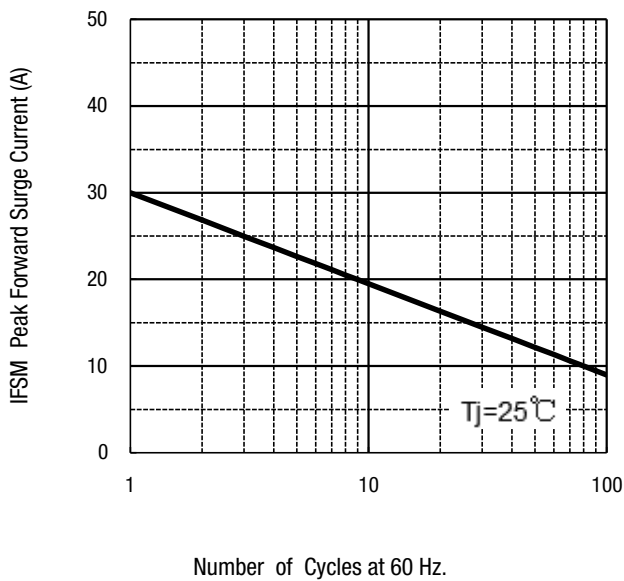
TYPICAL FORWARD CHARACTERISTIC



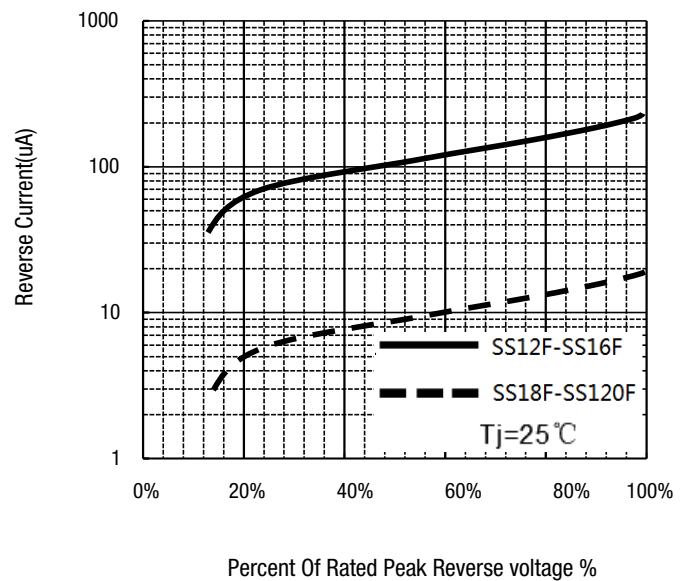
FORWARD CURRENT DERATING CURVE



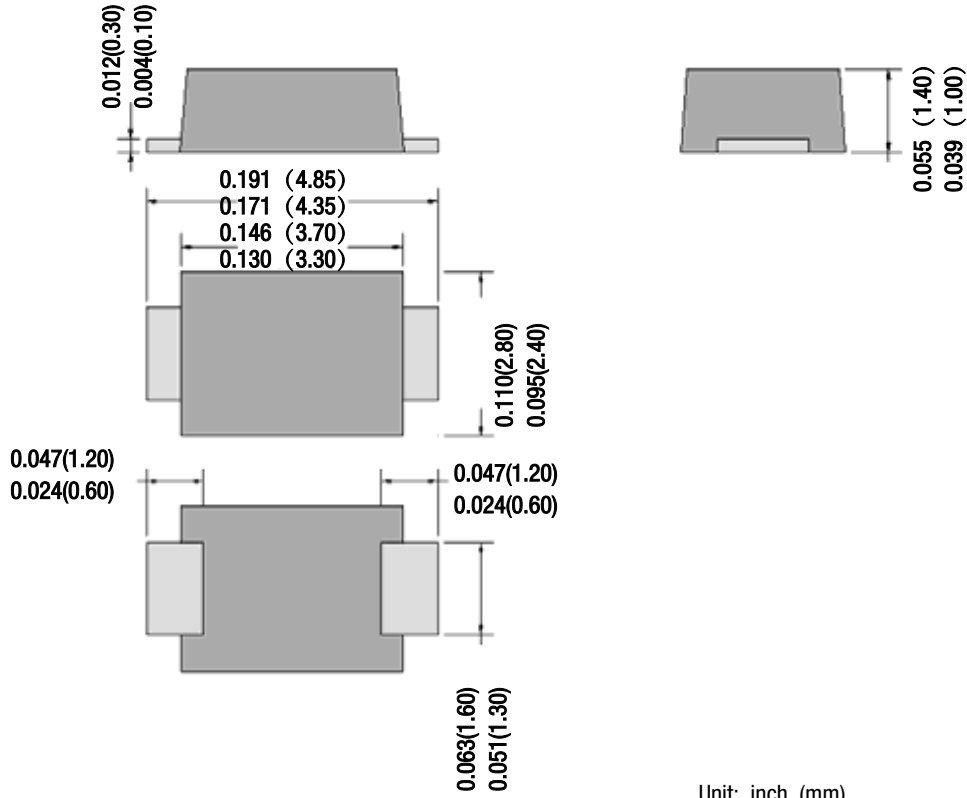
MAXIMUM NON REPETITIVE  
PEAK FORWARD SURGE CURRENT



Typical Reverse Characteristics



Package Outline



Package Information

Qty: 3,000/Tape and reel