

**Surface Mount Schottky Barrier Rectifier**  
**Reverse Voltage - 20 to 60V**  
**Forward Current - 5.0A**

## FEATURES

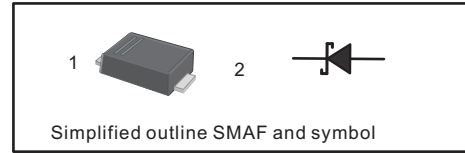
- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

## MECHANICAL DATA

- Case: SMAF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 27mg 0.00086oz

## PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



## Absolute Maximum Ratings and Electrical characteristics

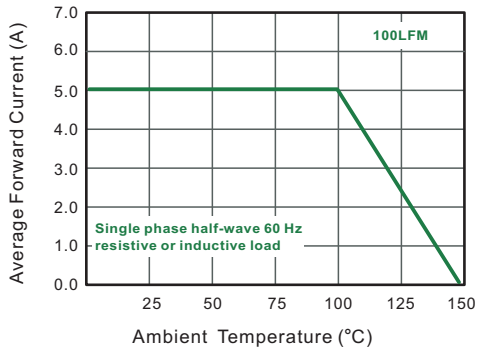
Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

Parameter	Symbols	SSL54F	SSL56F	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	40	60	V
Maximum RMS voltage	$V_{RMS}$	28	42	V
Maximum DC Blocking Voltage	$V_{DC}$	40	60	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5.0		A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	150		A
Max Instantaneous Forward Voltage at 5 A	$V_F$	0.45	0.55	V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Reverse Voltage $T_a = 100^\circ\text{C}$	$I_R$	1.0 50		mA
Typical Junction Capacitance <sup>1)</sup>	$C_j$	800	500	pF
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JA}$	55		$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	$T_j$	-55 ~ +125		$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 ~ +150		$^\circ\text{C}$

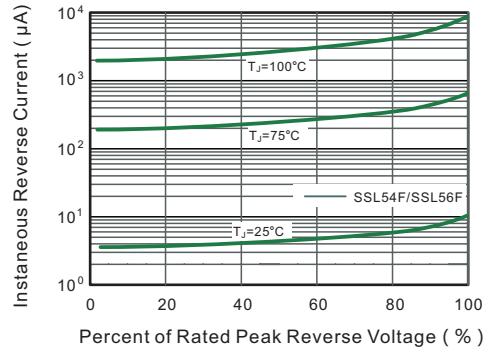
1) Measured at 1MHz and applied reverse voltage of 4 V D.C.

2) P.C.B. mounted with 0.2 X 0.2" (5 X 5 mm) copper pad areas.

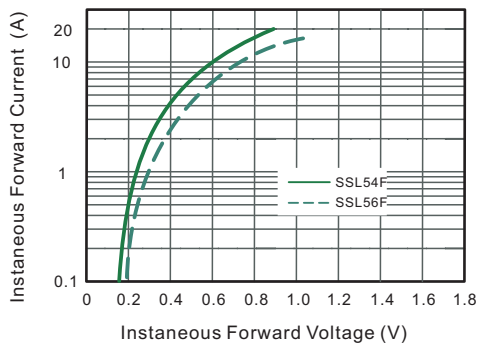
**Fig.1 Forward Current Derating Curve**



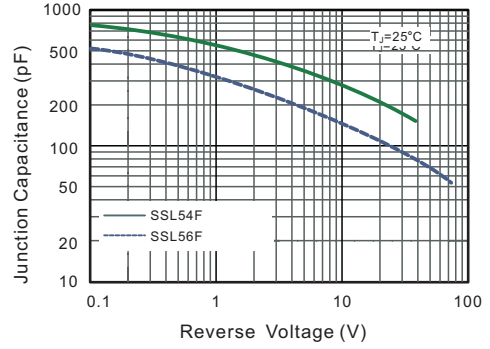
**Fig.2 Typical Reverse Characteristics**



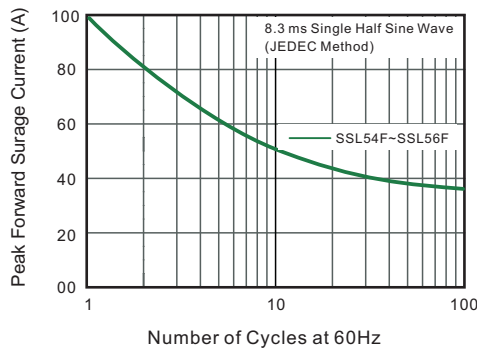
**Fig.3 Typical Forward Characteristic**



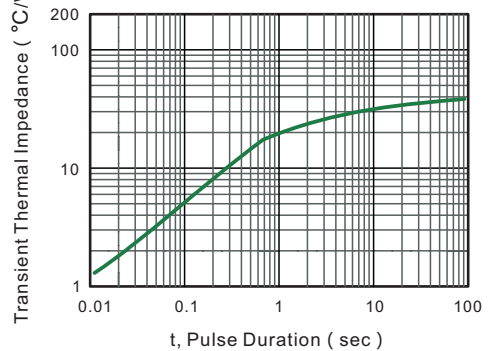
**Fig.4 Typical Junction Capacitance**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



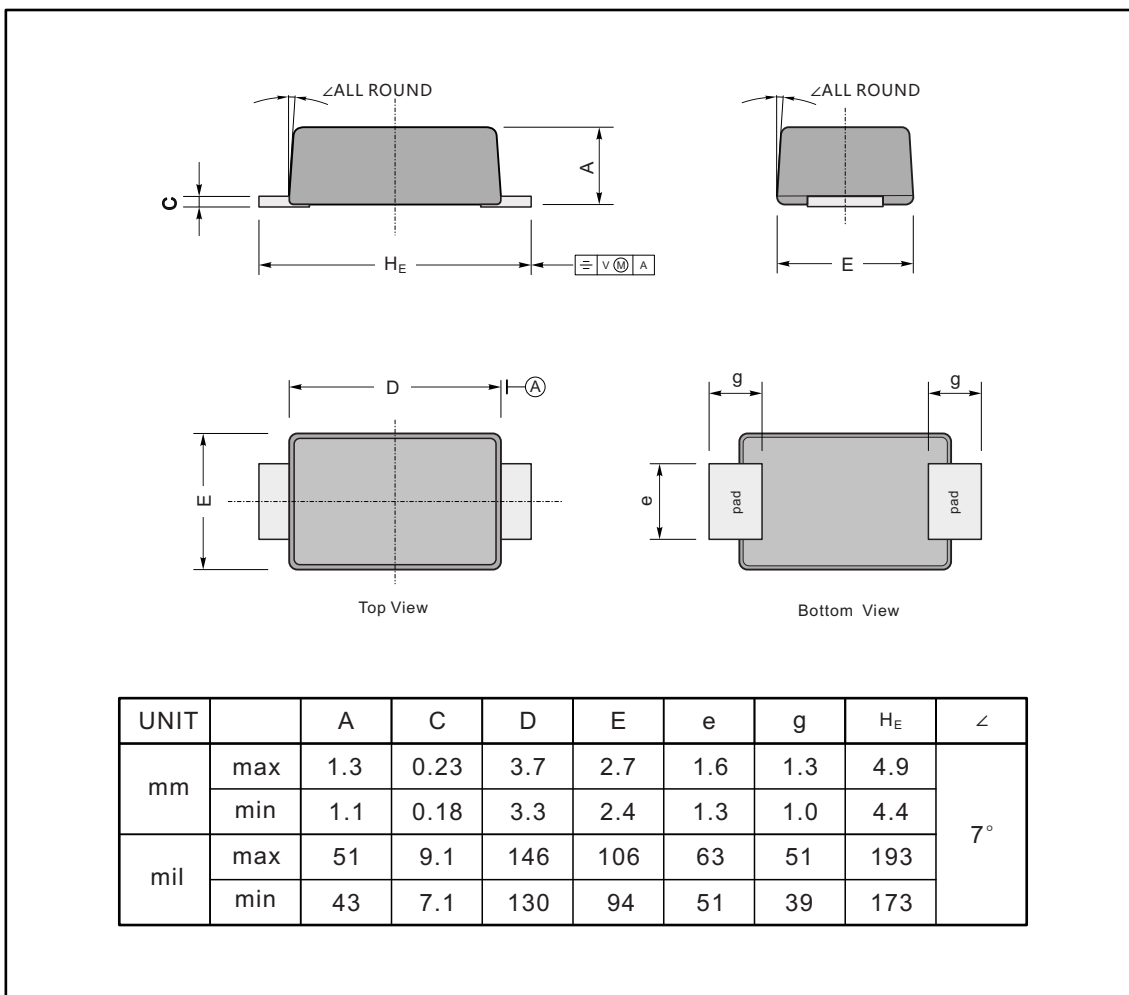
**Fig.6- Typical Transient Thermal Impedance**



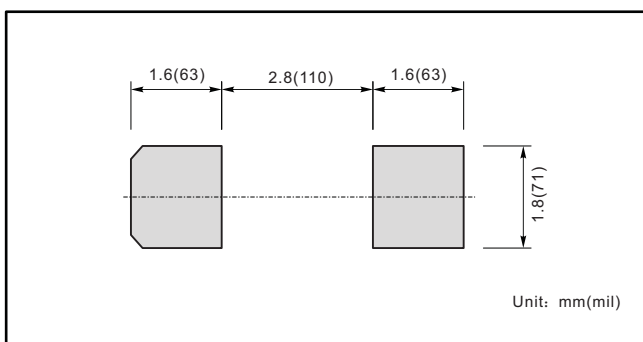
**PACKAGE OUTLINE**

Plastic surface mounted package; 2 leads

**SMAF**



**The recommended mounting pad size**



**Marking**

Type number	Marking code
SSL54F	SSL54
SSL56F	SSL56