

**Surface Mount Schottky Barrier Rectifier**
**Reverse Voltage - 100 V**
**Forward Current - 3.0A**
**Features**

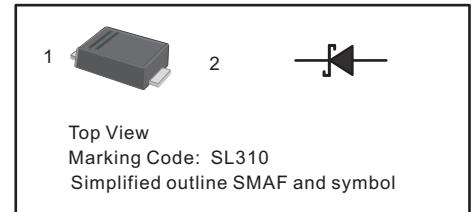
- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

**MECHANICAL DATA**

- Case: SMAF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 27mg / 0.00095oz

**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	SSL310F	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	V
Maximum RMS voltage	$V_{RMS}$	70	V
Maximum DC Blocking Voltage	$V_{DC}$	100	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	100	A
Max Instantaneous Forward Voltage at 3 A	$V_F$	0.6	V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Reverse Voltage	$I_R$	0.1	mA
Typical Junction Capacitance <sup>(1)</sup>	$C_j$	180	pF
Typical Thermal Resistance <sup>(2)</sup>	$R_{\theta JA}$	65	°C/W
Operating Junction Temperature Range	$T_j$	-55 ~ +150	°C
Storage Temperature Range	$T_{stg}$	-55 ~ +150	°C

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

( 2 ) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Fig.1 Forward Current Derating Curve

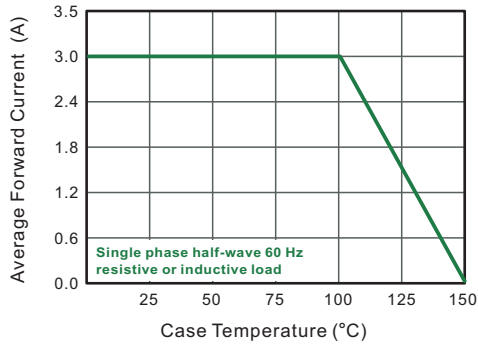


Fig.2 Typical Reverse Characteristics

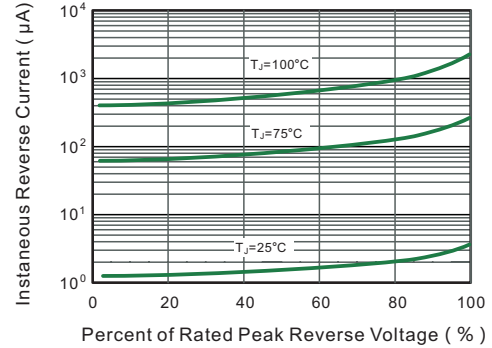


Fig.3 Typical Forward Characteristic

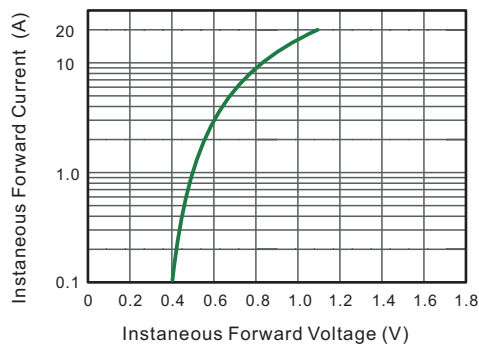


Fig.4 Typical Junction Capacitance

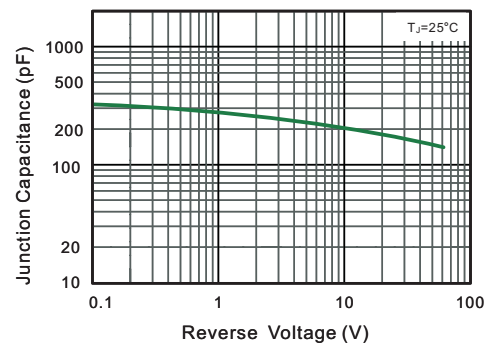


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

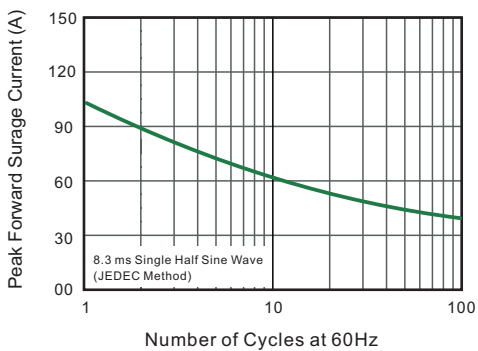
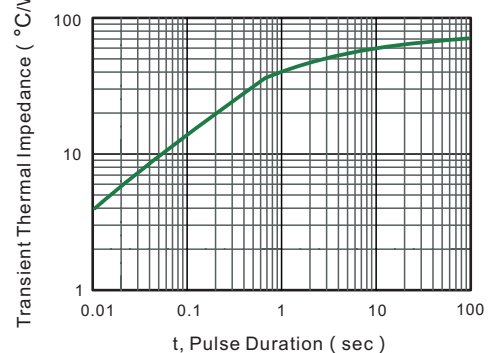
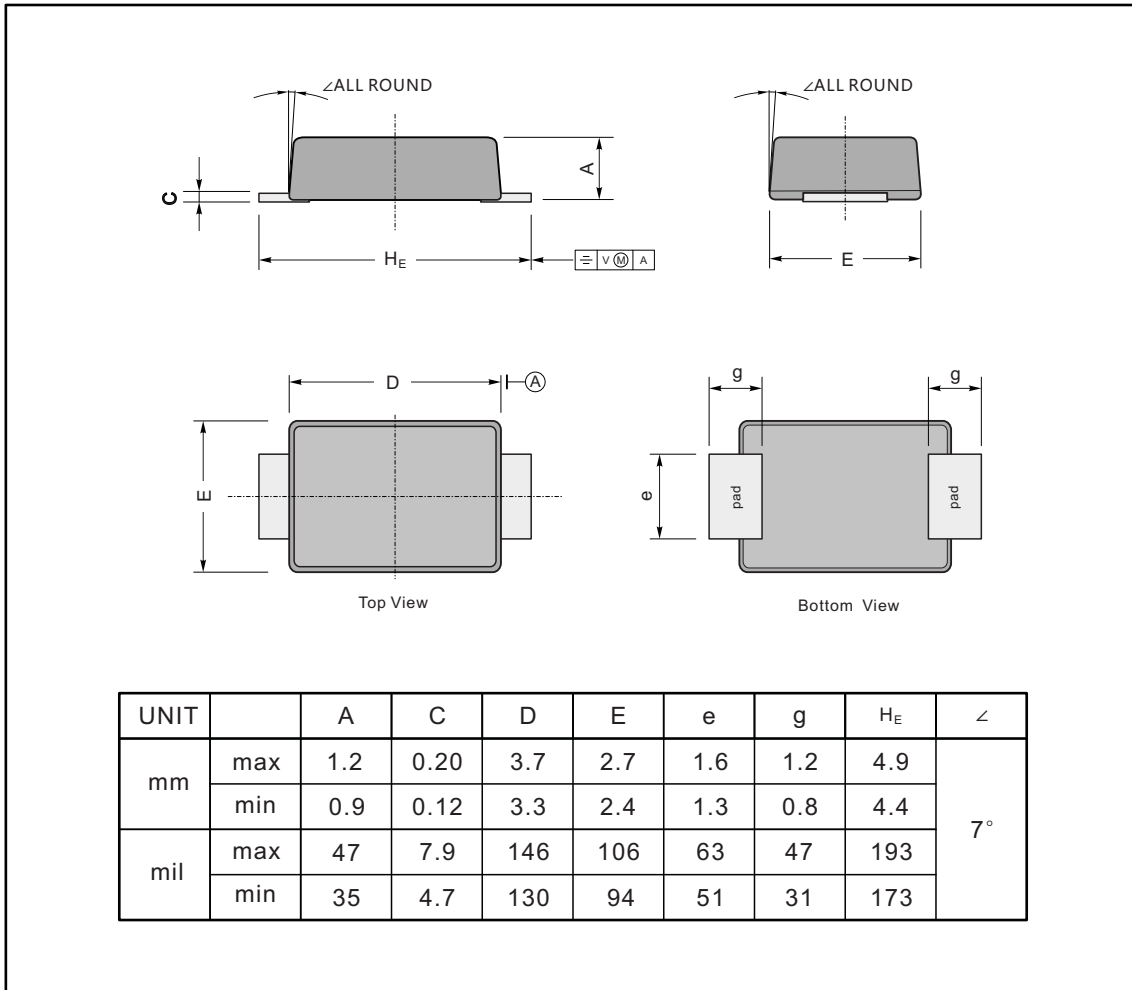
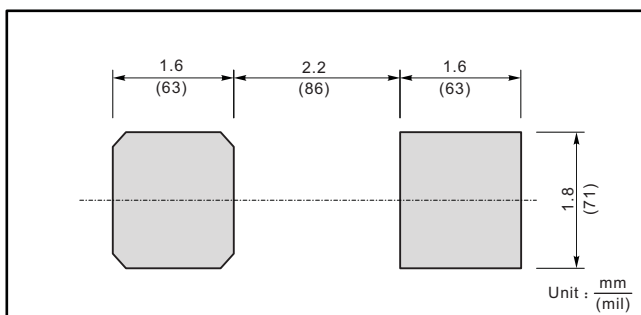


Fig.5- Typical Transient Thermal Impedance



**PACKAGE OUTLINE**

Plastic surface mounted package; 2 leads

**SMAF**

**The recommended mounting pad size**

**Marking**

Type number	Marking code
SSL310F	SL310