

Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 40V

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

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: SSL34
Simplified outline SMAF and symbol

MECHANICAL DATA

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

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	SSL34F	Units
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	40	V
Maximum RMS voltage	V _{RMS}	28	V
Maximum DC Blocking Voltage	V _{DC}	40	V
Maximum Average Forward Rectified Current at T _c = 100 °C	I _{F(AV)}	3	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I _{FSM}	80	A
Maximum Instantaneous Forward Voltage at 3 A	V _F	0.45	V
Maximum DC Reverse Current T _a = 25 °C at Rated DC Blocking Voltage T _a =100 °C	I _R	0.3 5	mA
Typical Junction Capacitance ⁽¹⁾	C _j	450	pF
Typical Thermal Resistance ⁽²⁾	R _{θJA} R _{θJC}	60 18	°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

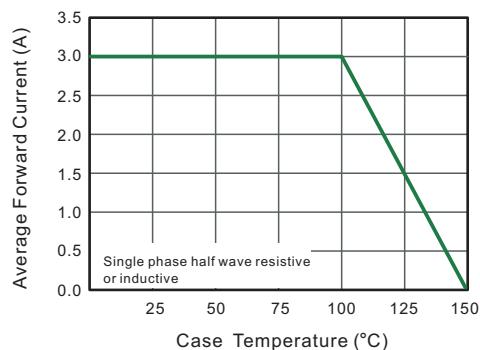


Fig.2 Typical Reverse Characteristics

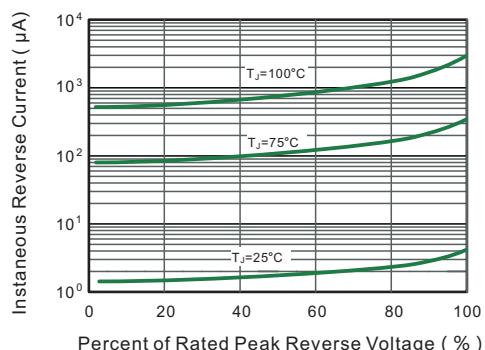


Fig.3 Typical Forward Characteristic

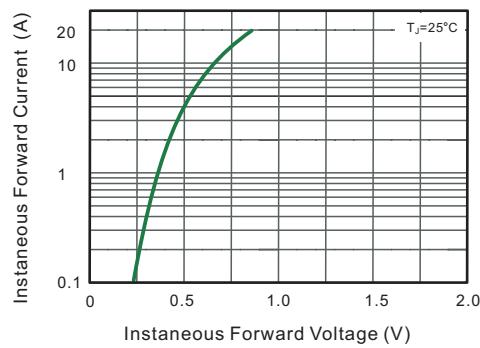


Fig.4 Typical Junction Capacitance

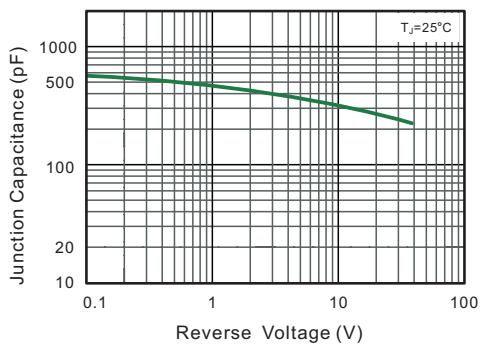


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

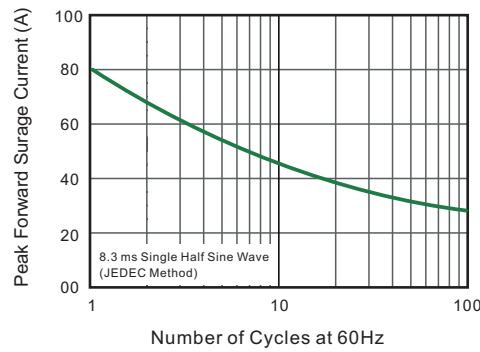
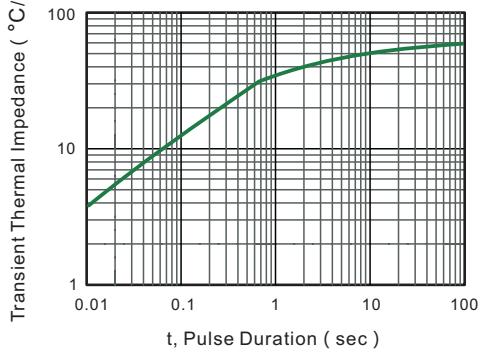


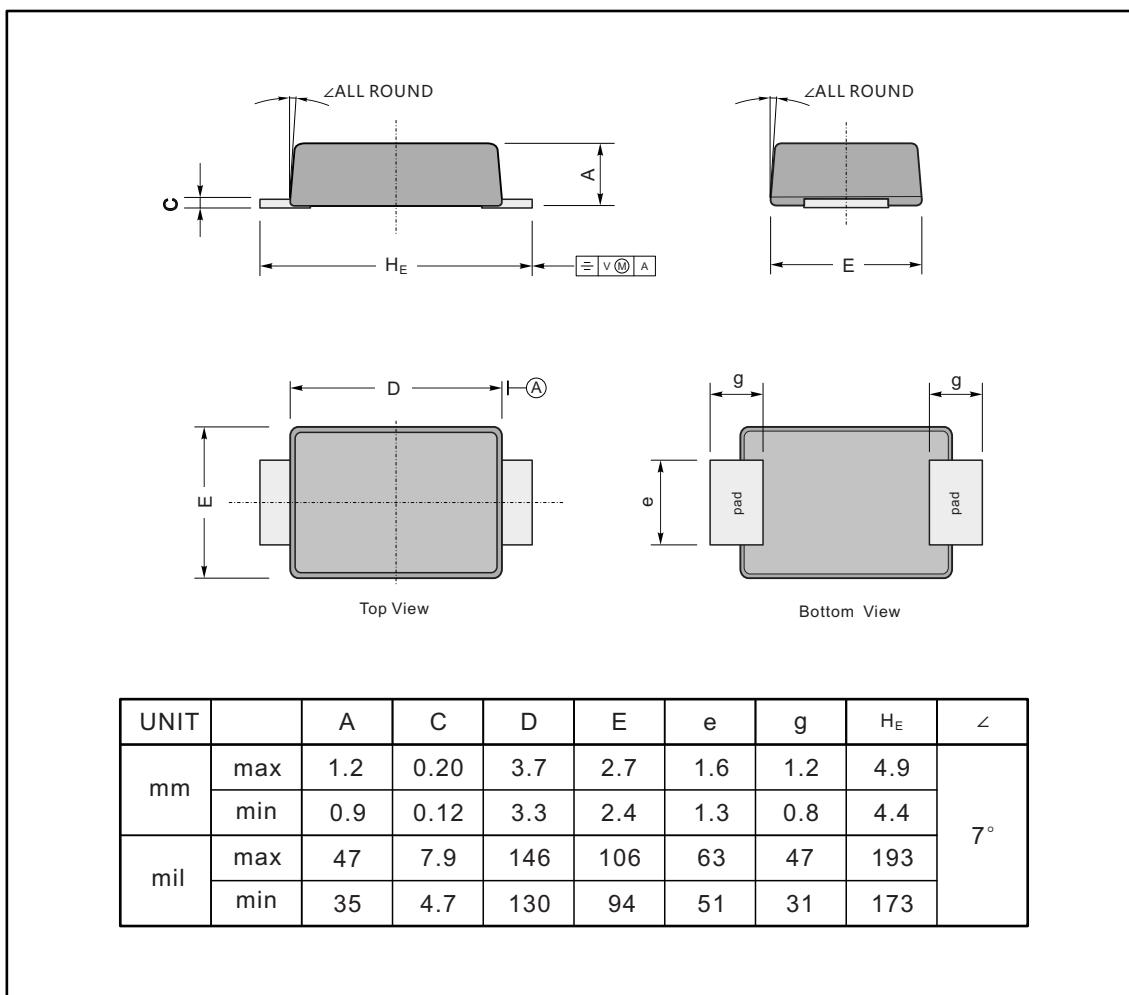
Fig.5- Typical Transient Thermal Impedance



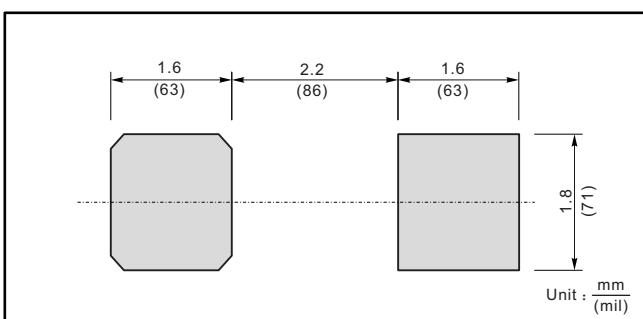
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SMAF



The recommended mounting pad size



Marking

Type number	Marking code
SSL34F	SSL34