

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

#### MECHANICAL DATA

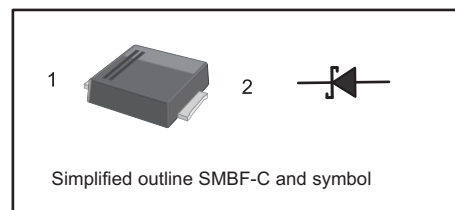
- Case: SMBF-C
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 57mg / 0.002oz

#### 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 %

#### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Parameter	Symbols	SSL34BFC	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 @ Fig.1	$I_{F(AV)}$	3	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	80	A
Peak Forward Surge Current, 1.0ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	160	A
$I^2t$ Rating for fusing (3ms ≤ t ≤ 8.3ms)	$I^2t$	26.5	A <sup>2</sup> S
Max Instantaneous Forward Voltage at 3 A	$V_F$	0.45	V
Maximum DC Reverse Current at Rated DC Reverse Voltage $T_a = 25^\circ\text{C}$ $T_a = 100^\circ\text{C}$	$I_R$	0.3 5	mA
Typical Junction Capacitance <sup>(1)</sup>	$C_j$	215	pF
Typical Thermal Resistance <sup>(2)</sup>	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	42 10 15	°C/W
Operating Junction Temperature Range	$T_j$	-55 ~ +125	°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 1.5" X 1.5" (3.81 X 3.81 cm) copper pad areas.



Fig.1 Forward Current Derating Curve

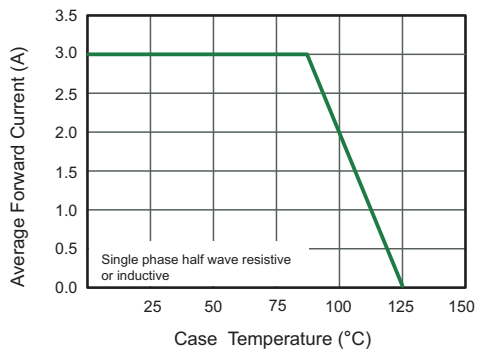


Fig.2 Typical Reverse Characteristics

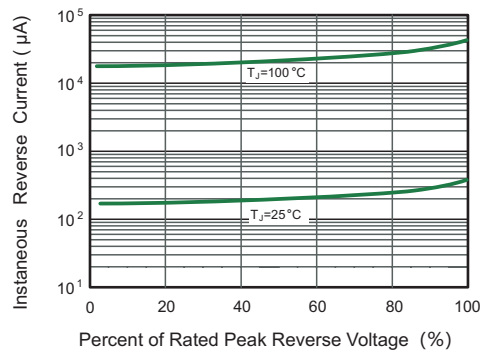


Fig.3 Typical Forward Characteristic

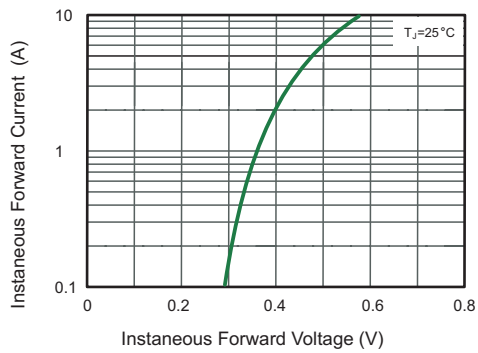


Fig.4 Typical Junction Capacitance

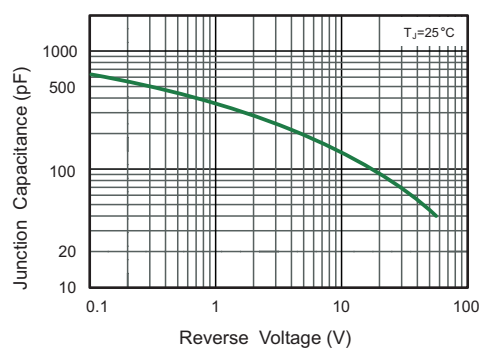
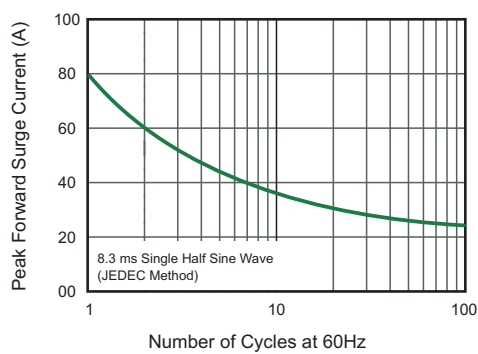


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

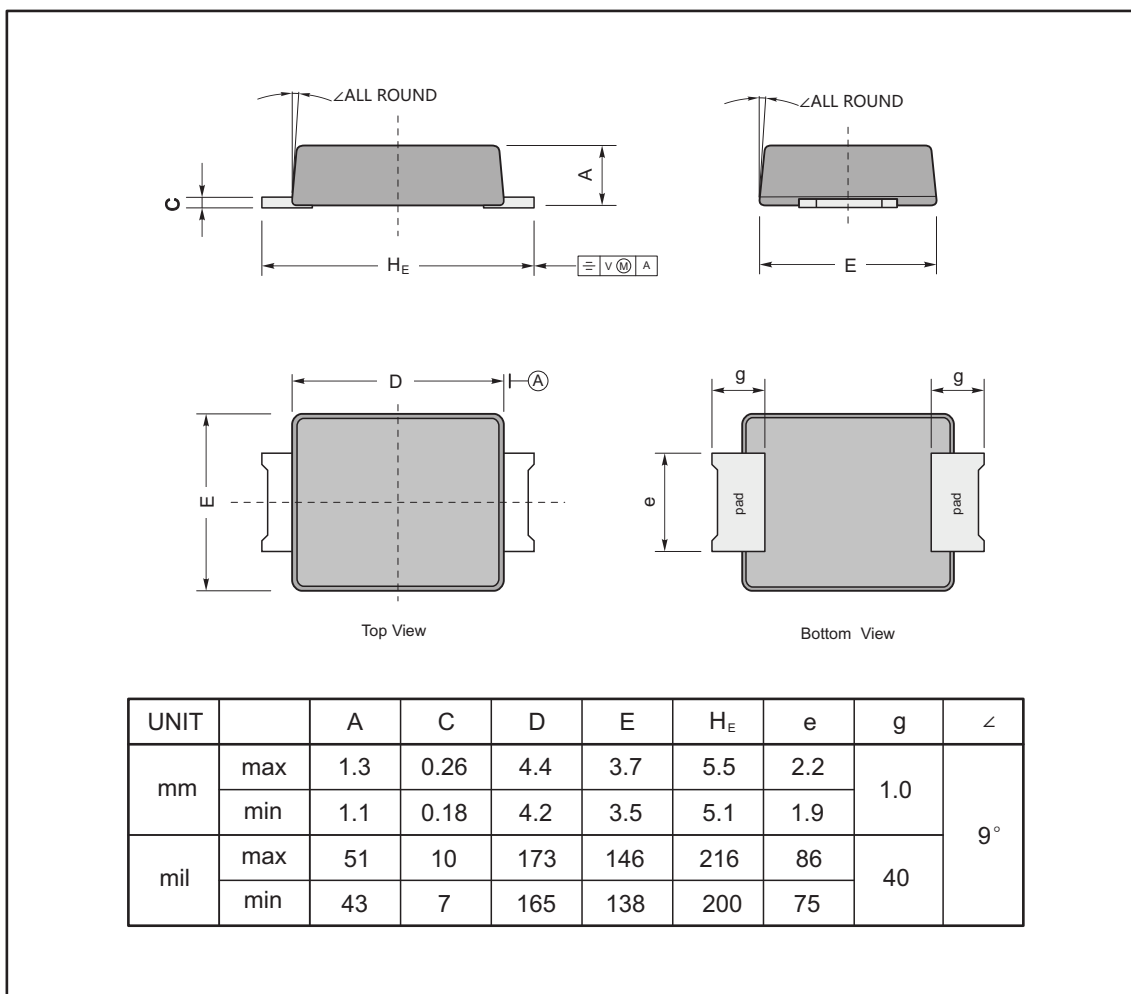




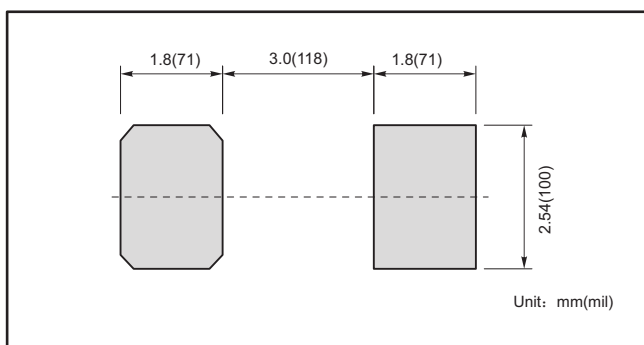
## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SMBF-C



### The recommended mounting pad size



### Marking

Type number	Marking code
SSL34BFC	SL34B



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