



**Surface Mount Schottky Barrier Rectifier**
**Reverse Voltage - 100 V**
**Forward Current - 3 A**
**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**

1.Cathode	2.Anode
	
	
SMAF	

**Marking Code**

SSL310F	YFW SL310
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**Absolute Maximum Ratings and Electrical characteristics**

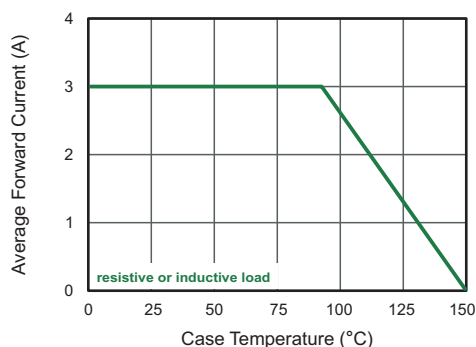
Ratings at 25 °C ambient temperature unless otherwise specified.Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

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
Peak Forward Surge Current, 1.0ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	200	A
$I^2t$ Rating for fusing ( $3ms \leq t \leq 8.3ms$ )	$I^2t$	41.5	A <sup>2</sup> S
Maximum Instantaneous Forward Voltage at 3 A	$V_F$	0.6	V
Maximum Instantaneous Reverse Current TA = 25°C at Rated DC Reverse Voltage TA = 100°C	$I_R$	0.1 3	mA
Typical Junction Capacitance <sup>(1)</sup>	$C_j$	260	pF
Typical Thermal Resistance <sup>(2)</sup>	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	100 20 30	°C/W
Operating Junction Temperature Range	$T_j$	-55 ~ +150	°C
Storage Temperature Range	$T_{stg}$	-55 ~ +150	°C

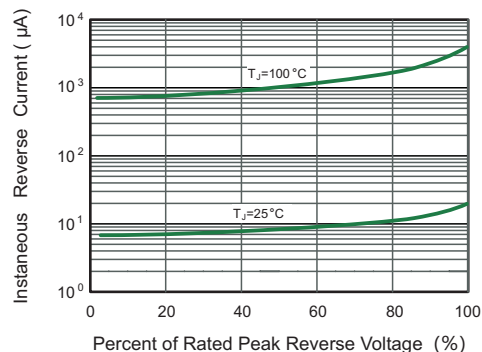
(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

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

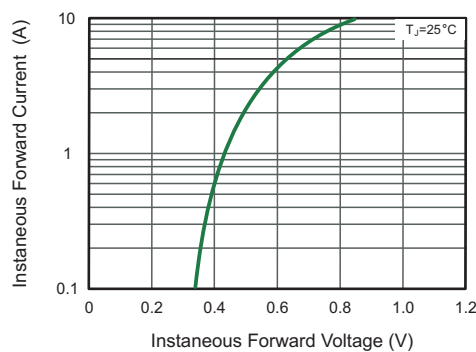
**Fig.1 Forward Current Derating Curve**



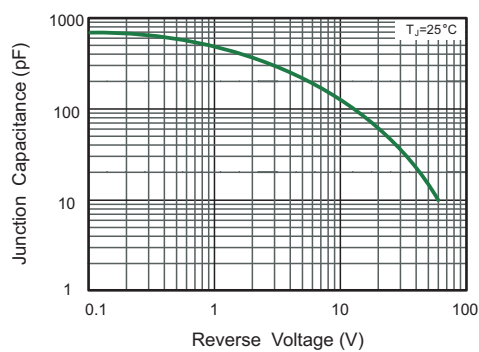
**Fig.2 Typical Reverse Characteristics**



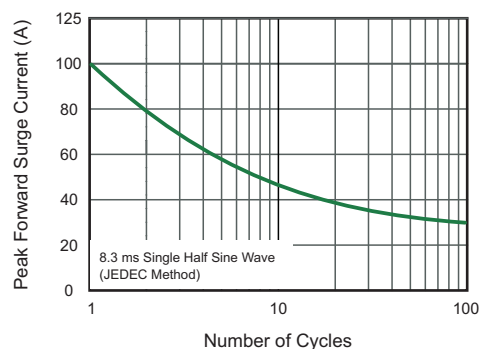
**Fig.3 Typical Forward Characteristic**



**Fig.4 Typical Junction Capacitance**



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



## Marking Diagram



## Ordering information

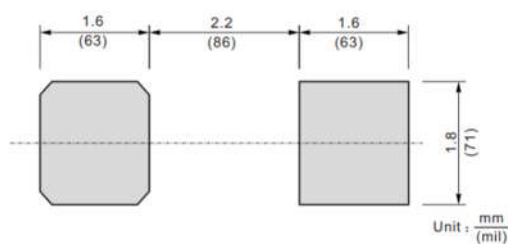
Package	Packing Description	Packing Quantity
SMAF	Tape/Reel, 7" reel	3000PCS/Reel 90000PCS/Carton

## Package Dimensions

### SMAF

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.1	35	43
C	0.12	0.20	4.7	7.9
D	3.3	3.7	130	146
E	2.4	2.7	94	106
e	1.3	1.6	51	63
g	0.8	1.2	31	47
HE	4.4	4.9	173	193
∠	7°			

### The recommended mounting pad size



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