

SSL110F

Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 100 V

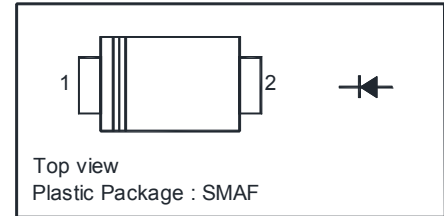
Forward Current - 1 A

Features

- Low leakage current
- Negligible switching losses
- High junction temperature capability

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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%.

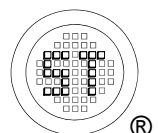
Parameter	Symbols	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Average Forward Rectified Current	$I_{F(AV)}$	1	A
Peak Forward Surge Current 10 ms Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	50	A
Operating Junction Temperature	T_j	175	°C
Storage Temperature Range	T_{stg}	- 55 to + 175	°C

Thermal Characteristics

Parameter	Symbol	Value	Unit
Typical Thermal Resistance, Junction to Lead	$R_{\theta JL}$	25	°C/W

Electrical Characteristics (at $T_a = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100 \mu\text{A}$	$V_{(BR)R}$	100	-	-	V
Forward Voltage at $I_F = 1 \text{ A}$ at $I_F = 2 \text{ A}$ at $I_F = 1 \text{ A}, T_J = 125^\circ\text{C}$ at $I_F = 2 \text{ A}, T_J = 125^\circ\text{C}$	V_F	- - - -	- - 0.58 0.65	0.77 0.86 - -	V
Reverse Current at $V_R = 100 \text{ V}$ at $V_R = 100 \text{ V}, T_J = 125^\circ\text{C}$	I_R	- -	- 0.2	4 -	μA mA



Electrical Characteristics Curves

Fig 1. Reverse Characteristics Curve

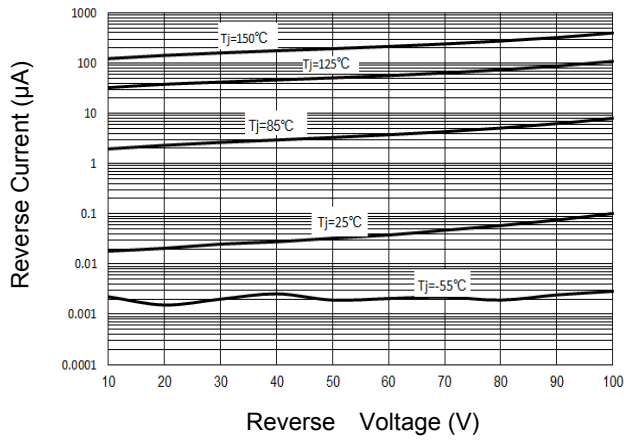


Fig 2. Forward Characteristics Curve

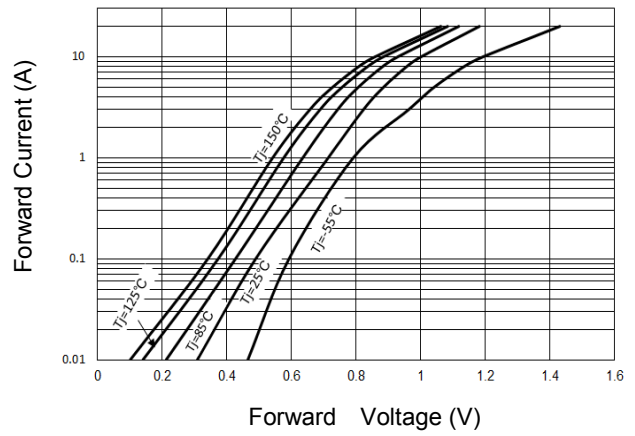


Fig 3. Junction Capacitance

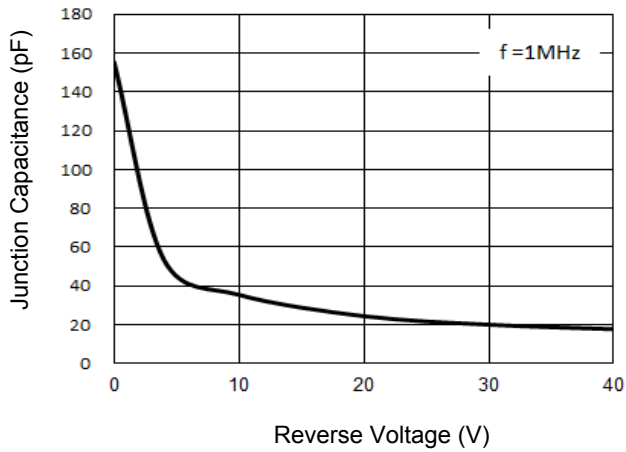
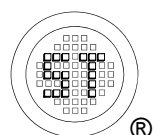
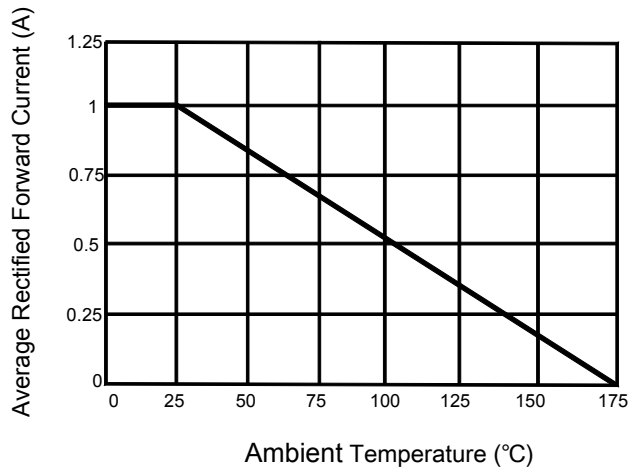


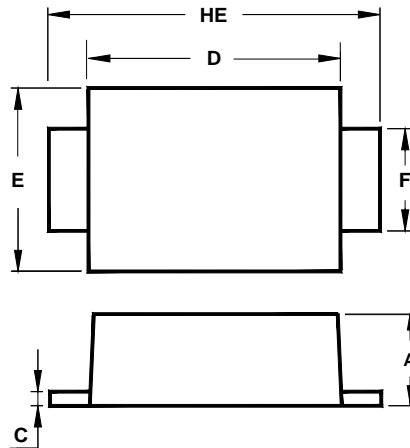
Fig 4. Average Forward Current Derating Curve



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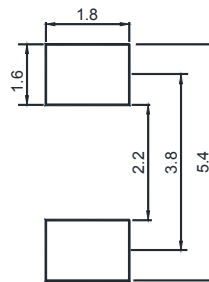
Package Outline Dimensions (Units: mm)

SMAF



UNIT	A	C	D	E	F	H _E
mm	1.1 0.9	0.2 0.12	3.7 3.3	2.80 2.40	1.6 1.3	4.9 4.4

Recommended Soldering Footprint

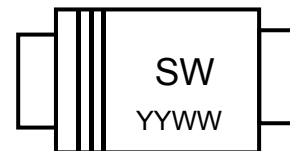


Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SMAF	12	4 ± 0.1	(0.157 ± 0.004)	178	7	3,000
				330	13	10,000

Marking information

- " SW " = Part No.
- " III " = Cathode line
- "YYWW" = Date Code Marking
- "Y" = Year
- "W" = Week
- Font type: Arial



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