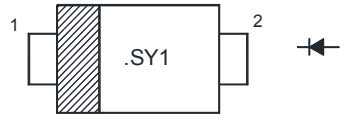
SDB110LFW-AH

Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 100 V
Forward Current - 1 A

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code : .SY1
Simplified outline SOD-123FL and symbol

Features

- AEC-Q101 Qualified
- Guardring for Stress Protection
- Low Forward Voltage
- Halogen and Antimony Free(HAF), RoHS compliant

Absolute Maximum Ratings and Characteristics

Ratings at T_a = 25℃ ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	Value	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1	A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50	A
Forward Voltage at I_F = 1 A at I_F = 2 A	V_F	 0.76 0.84	V
Reverse Current at $V_R = V_{RRM}$ at $V_R = V_{RRM}$, T_j = 125℃	I_R	 40 0.5	 μA mA
Thermal Resistance Junction to Lead [1)]	$R_{\theta JL}$	23	℃/W
Thermal Resistance Junction to Ambient [1)]	$R_{\theta JA}$	85	℃/W
Thermal Resistance Junction to Ambient [2)]	$R_{\theta JA}$	330	℃/W
Storage and Operating Junction Temperature Range	T_j , T_{stg}	- 55 to + 150	℃

[1)] Device mounted on FR-4 substrate PC board, 2oz copper, with 1-inch square copper plate.

[2)] Device mounted on FR-4 substrate PC board, 2oz copper, with minimum recommended pad layout.

Dated: 28/08/2020 Rev : 01

Electrical characteristic curves

Fig 1. Reverse Characteristics

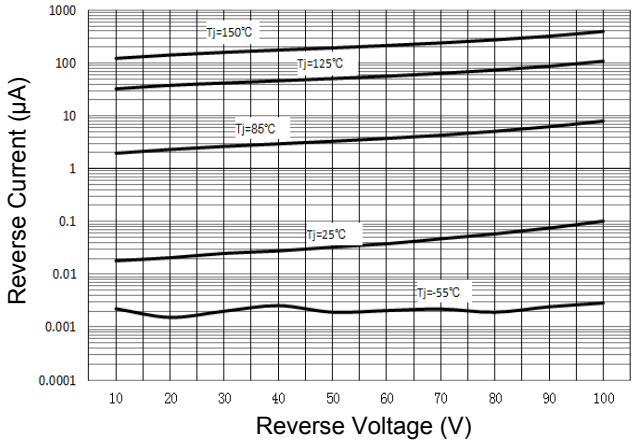


Fig 2. Forward Characteristics

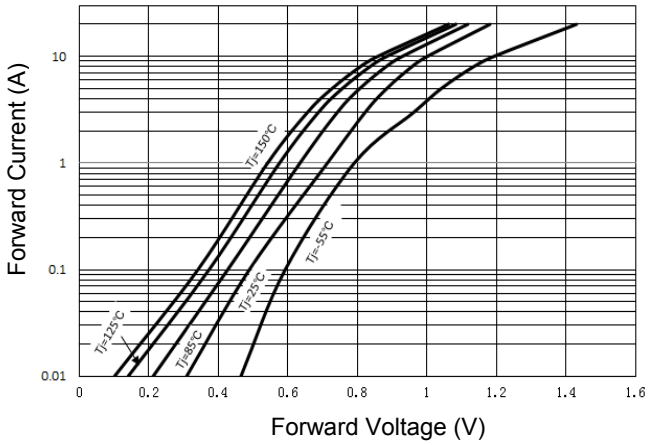
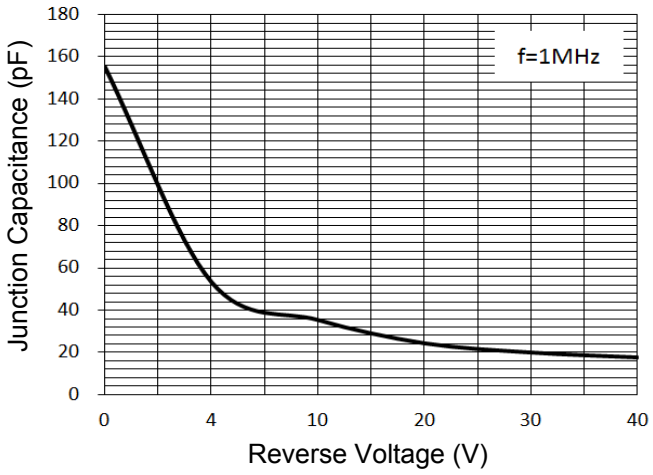
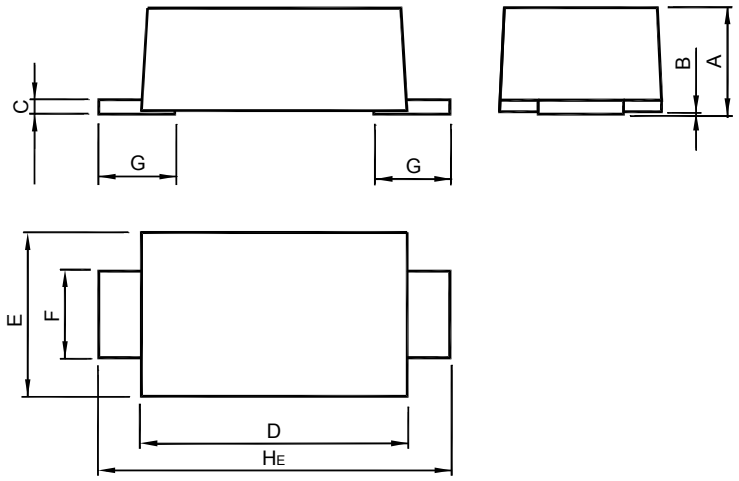


Fig 3. Junction Capacitance



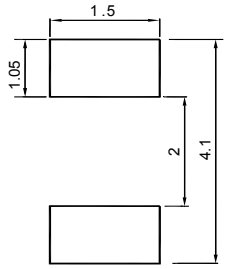
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads **SOD-123FL**



UNIT	A	B	C	D	E	F	G	H_E
mm	1.08 0.88	0.1 0	0.2 0.1	2.9 2.7	1.9 1.7	1.1 0.8	0.85 0.45	3.9 3.5

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOD-123FL	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

" III " = Cathode line
" • " = HAF (Halogen and Antimony Free)
" SY1 " = Part No.
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