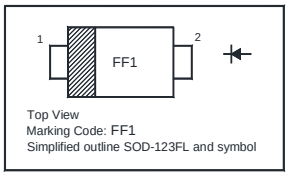
FR1535MW-HAF

Surface Mount Fast Recovery Rectifiers

Reverse Voltage - 1000 V
Forward Current - 1.5 A

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: FF1
Simplified outline SOD-123FL and symbol

Features

- Glass Passivated Chip Juntion
- For surface mounted applications
- Low profile package
- Fast reverse recovery time
- Halogen and Antimony Free(HAF), RoHS complian

Maximum Ratings and Electrical characteristics

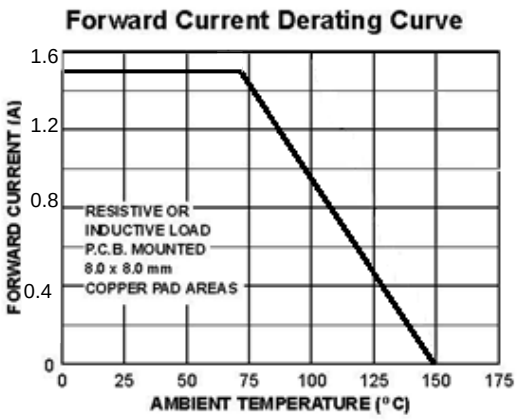
Ratings at 25℃ ambient temperature unless otherwise specified.

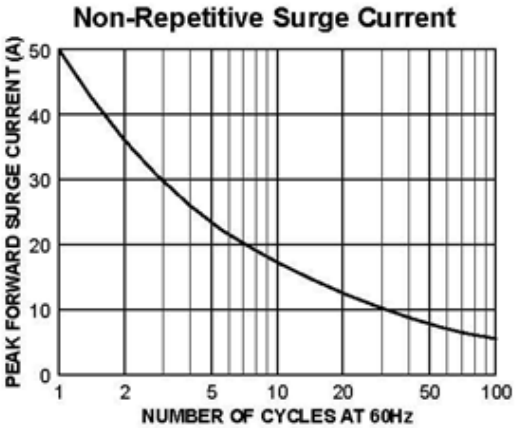
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

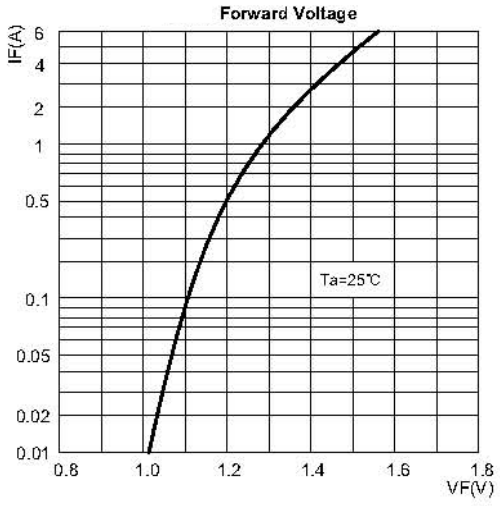
Parameter	Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	V
Maximum Average Forward Rectified Current at T_a = 65 °C	$I_{F(AV)}$	1.5	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50	A
Maximum Instantaneous Forward Voltage at 1.5 A	V_F	1.3	V
Maximum DC Reverse Current T_a = 25℃ at Rated DC Blocking Voltage T_a = 125℃	I_R	5 50	μA
Maximum Reverse Recovery Time [1]	t_{rr}	150~350	ns
Typical Junction Capacitance [2]	C_j	15	pF
Operating and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150	℃

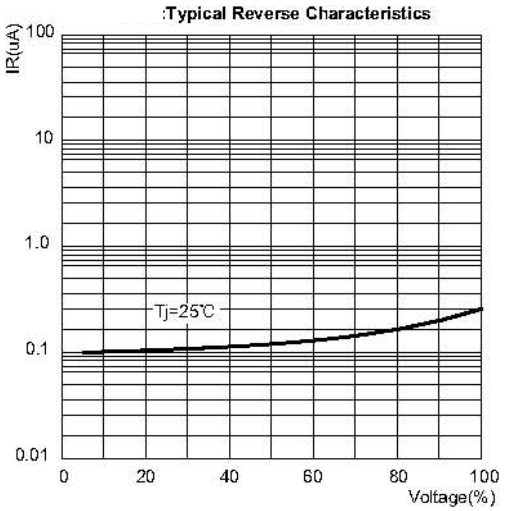
[1] Measured with I_F = 0.5 A, I_R = 1 A, I_{rr} = 0.25 A

[2] Measured at 1MHz and applied reverse voltage of 4V D.C


Forward Current Derating Curve
FORWARD CURRENT (A)
1.6
1.2
0.8
0.4
0
RESISTIVE OR
INDUCTIVE LOAD
P.C.B. MOUNTED
8.0 x 8.0 mm
COPPER PAD AREAS
0
25
50
75
100
125
150
175
AMBIENT TEMPERATURE (°C)


Non-Repetitive Surge Current
PEAK FORWARD SURGE CURRENT (A)
50
40
30
20
10
0
1
2
5
10
20
50
100
NUMBER OF CYCLES AT 60Hz


Forward Voltage
IF(A)
6
4
2
1
0.5
0.1
0.05
0.02
0.01
Ta=25℃
0.8
1.0
1.2
1.4
1.6
1.8
VF(V)


Typical Reverse Characteristics
IR(uA)
100
10
1.0
0.1
0.01
Tj=25℃
0
20
40
60
80
100
Voltage(%)

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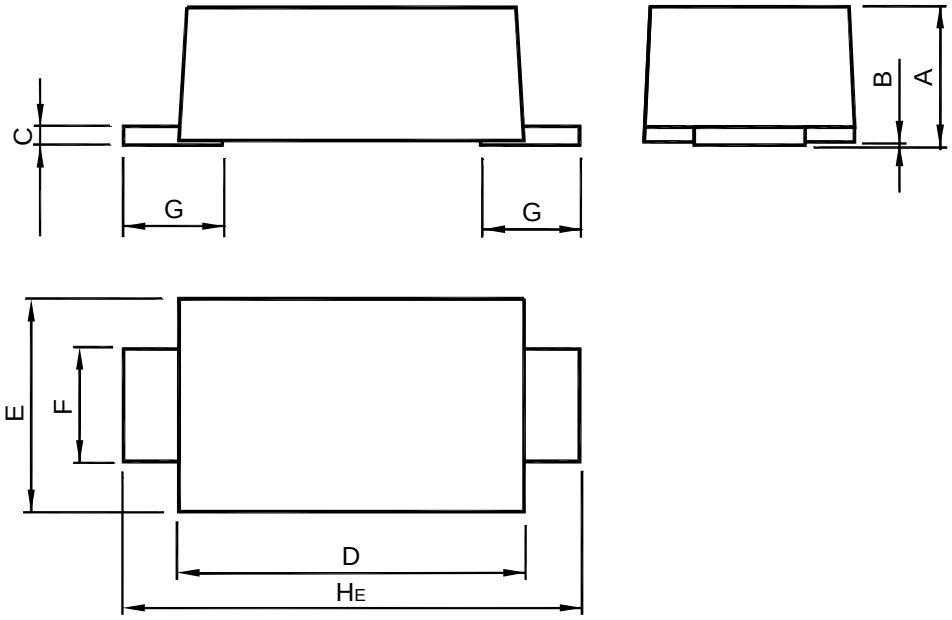
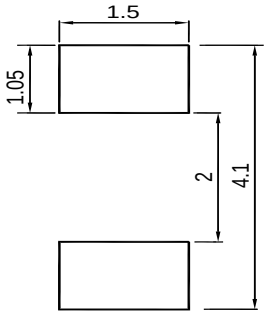
PACKAGE OUTLINE

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