

FR15MW

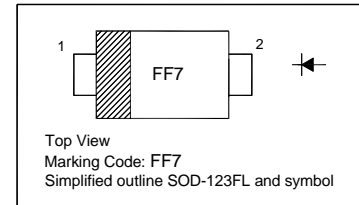
Surface Mount Fast Recovery Rectifiers

Reverse Voltage - 1000 V

Forward Current - 1.5 A

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Maximum Ratings and Electrical characteristics

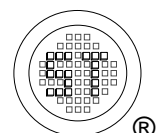
Ratings at 25°C ambient temperature unless otherwise specified.

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

Parameter	Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	V
Maximum Average Forward Rectified Current at $T_a = 65^\circ\text{C}$	$I_{F(AV)}$	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 at Rated DC Blocking Voltage	I_R	5 50	μA
Maximum Reverse Recovery Time ¹⁾	t_{rr}	500	ns
Typical Junction Capacitance ²⁾	C_j	15	pF
Operating and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150	$^\circ\text{C}$

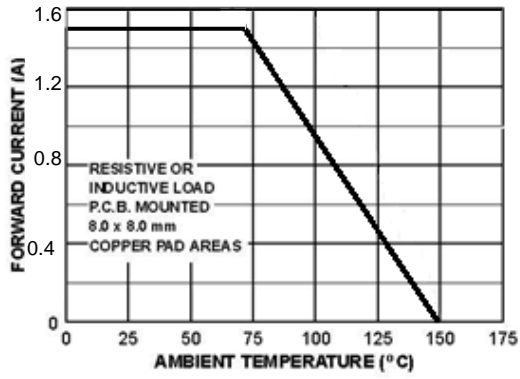
¹⁾ Measured with $I_F = 0.5 \text{ A}$, $I_R = 1 \text{ A}$, $I_{rr} = 0.25 \text{ A}$

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

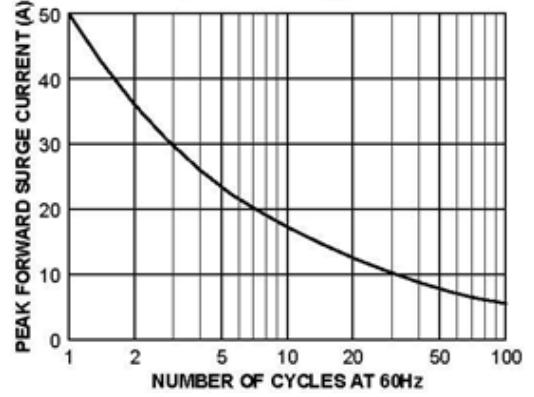


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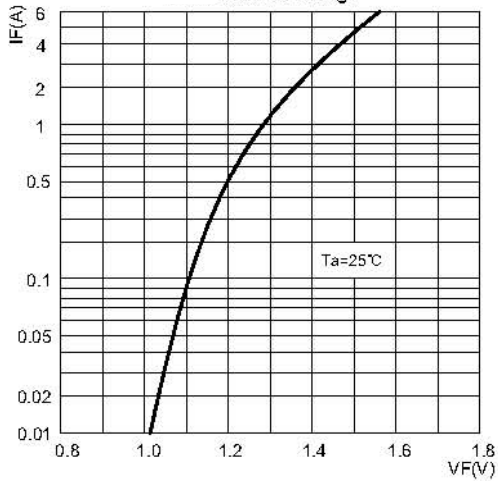
Forward Current Derating Curve



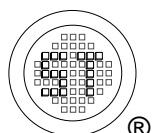
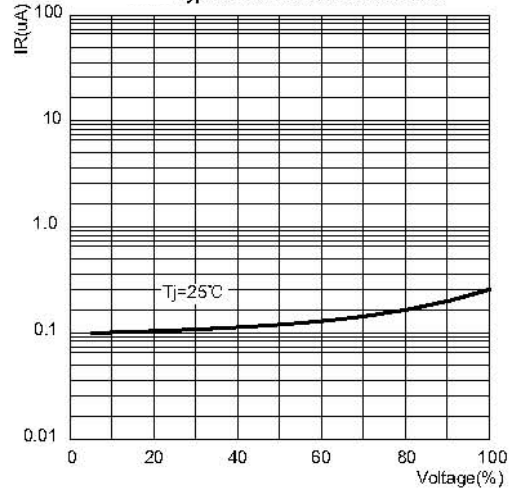
Non-Repetitive Surge Current



Forward Voltage



Typical Reverse Characteristics

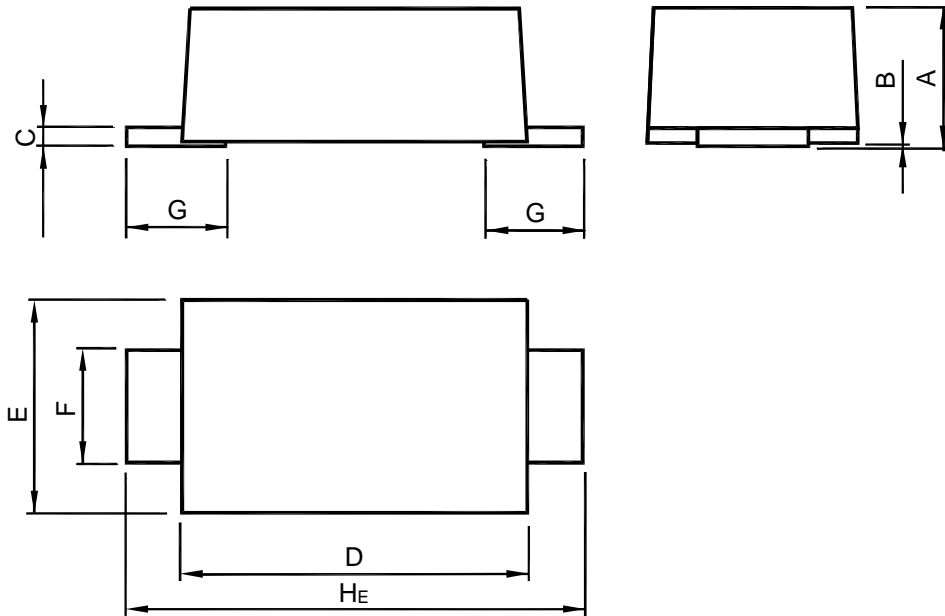


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PACKAGE OUTLINE

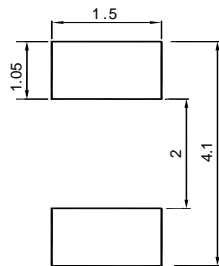
Plastic surface mounted package; 2 leads

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 2.6	1.9 1.7	1.1 0.8	0.9 0.7	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

