

FR1AW THRU FR1MW

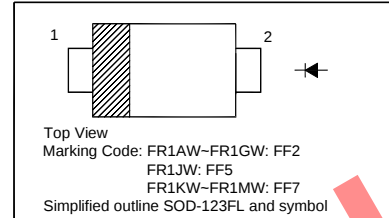
Surface Mount Fast Recovery Rectifiers

Reverse Voltage - 50 to 1000 V

Forward Current - 1 A

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Maximum Ratings and Electrical characteristics

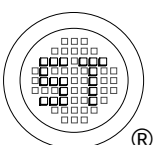
Ratings at 25°C ambient temperature unless otherwise specified.

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

Parameter	Symbols	FR1AW	FR1BW	FR1DW	FR1GW	FR1JW	FR1KW	FR1MW	Units
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at T _a = 65°C	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
Maximum Instantaneous Forward Voltage at 1 A	V _F	1.3							V
Maximum DC Reverse Current T _a = 25°C at Rated DC Blocking Voltage T _a = 125°C	I _R	5 50							µA
Maximum Reverse Recovery Time ¹⁾	t _{rr}	150				250	500		ns
Typical Junction Capacitance ²⁾	C _j	15							pF
Operating and Storage Temperature Range	T _j , T _{stg}	- 55 to + 150							°C

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

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



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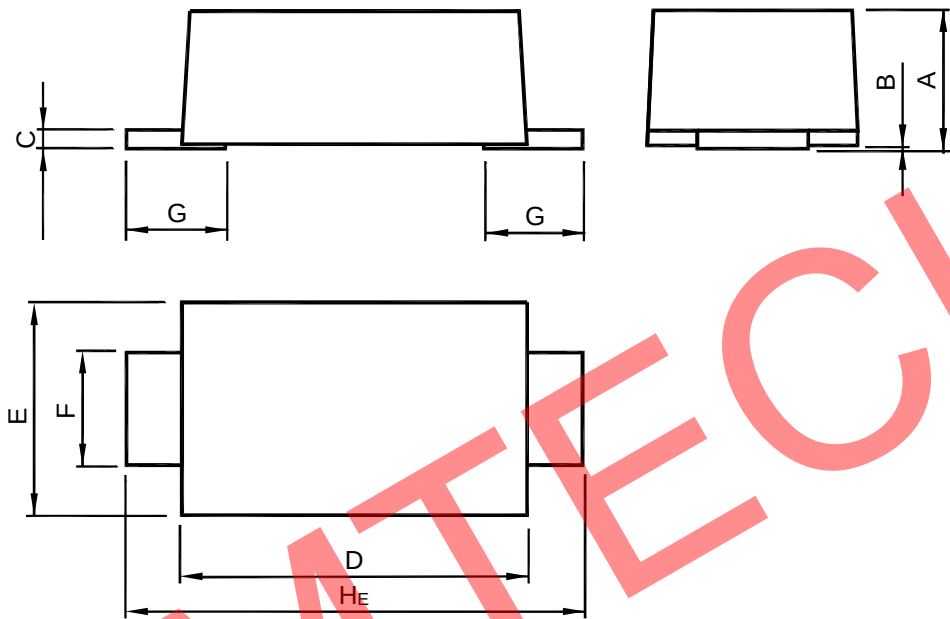
Dated: 03/08/2013 Rev: 01

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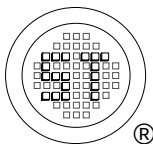
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123FL



UNIT	A	B	C	D	E	F	G	H _E
mm	1.08	0.1	0.2	2.9	1.9	1.1	0.9	3.9
	0.88	0	0.1	2.6	1.7	0.8	0.7	3.5



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