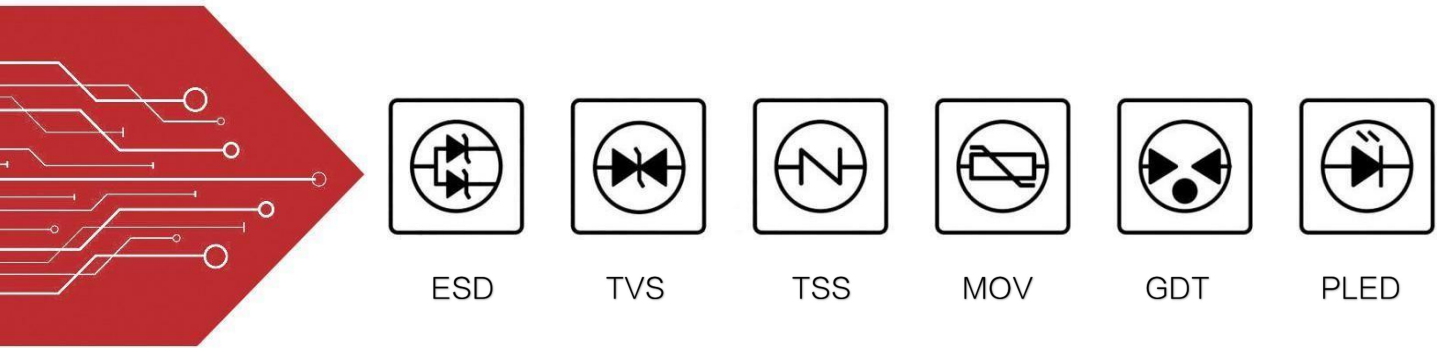
MSKSEMI
SEMICONDUCTOR



Product data sheet

www.msksemi.com

FEATURES

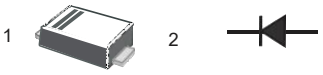
- For surface mounted applications
- Low profile package
- Glass Passivated Chip Juntion
- Ideal for automated placement
- Fast reverse recovery time
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case: SOD-123FL
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight:15mg 0.00048oz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



SOD-123FL

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	FR101 F1	FR102 F2	FR103 F3	FR104 F4	FR105 F5	FR106 F6	FR107 F7	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 Ta = 65 °C	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30							A
Maximum Instantaneous Forward Voltage at 1 A	V_F	1.3							V
Maximum DC Reverse Current at Rated DC Blocking Voltage Ta = 25 °C Ta =125 °C	I_R	1 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 ~ +150							°C

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

Fig.1 Forward Current Derating Curve

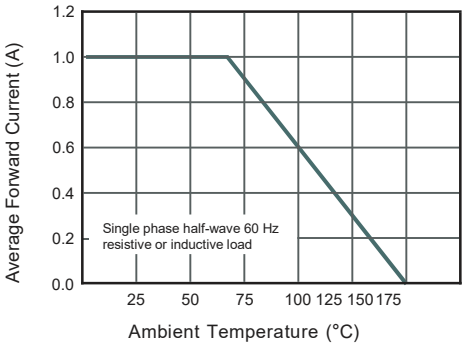


Fig.2 Typical Reverse Characteristics

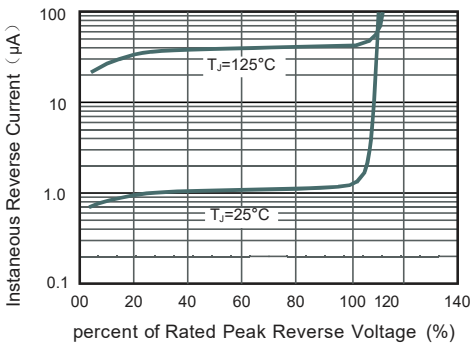


Fig.3 Typical Instaneous Forward Characteristics

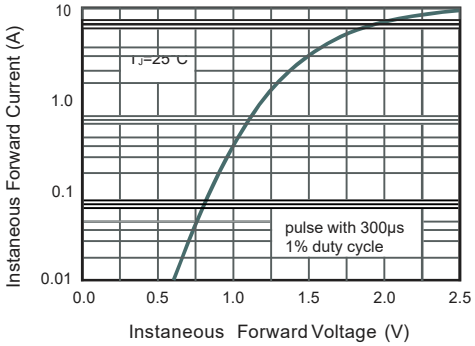


Fig.4 Typical Junction Capacitance

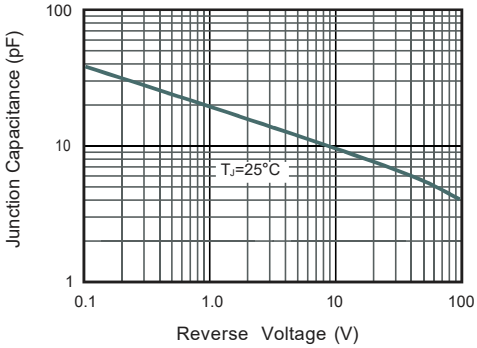
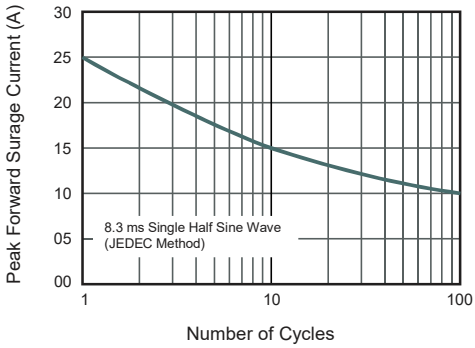
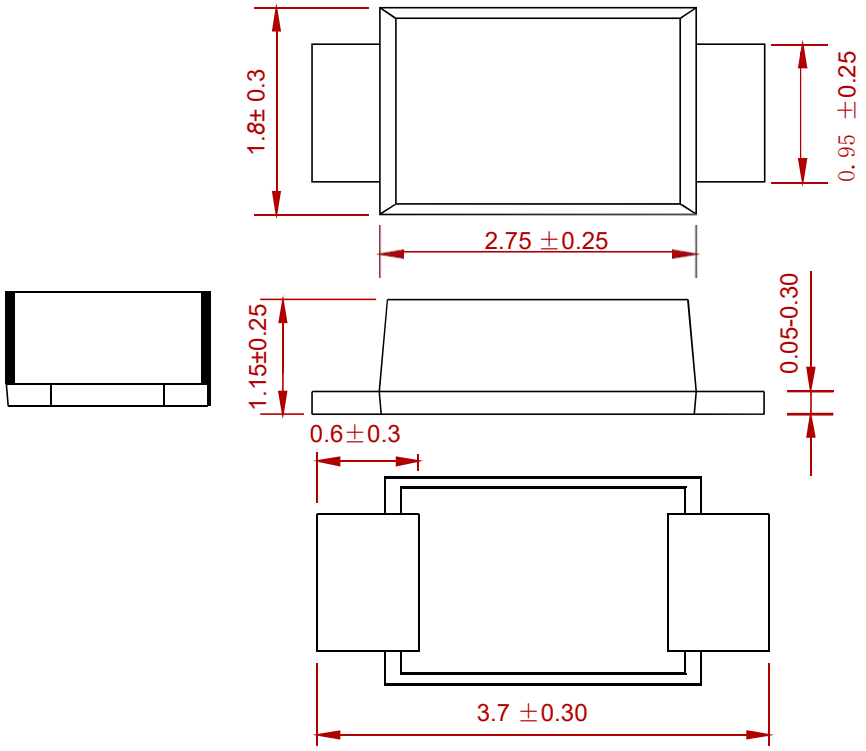


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

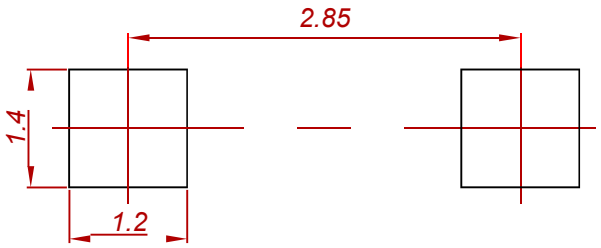


PACKAGE MECHANICAL DATA



Dimensions in millimeters

Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
FR101 THRU FR107	SOD-123FL	3000

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