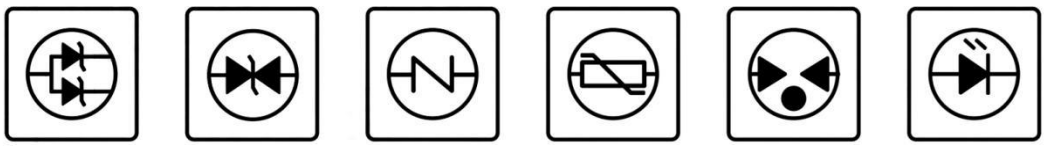
MSKSEMI
SEMICONDUCTOR



Product data sheet

SOD-123FL

Un-directional

Features

- Glass passivated or planar junction
- Excellent clamping capability
- Repetition rate (duty cycle): 0.01%
- Low profile package and low inductance
- Fast response time: typically less than 1.0ps from 0V to V_{BR}min.
- High temperature soldering: 260℃/10s atterminals.
- For surface mounted applications in ordertooptimize board space.

Mechanical Characteristics

Package:SOD-123FL

- Case Material: “Green” MoldingCompound.
- UL Flammability Classification Rating 94V-0
- Polarity: Color band denotes cathode except bi-directional models
- Weight: 0.017g
- Terminal Connections: See Diagram Below
- Marking Information: See Below

Applications

- I/O Interface.
- Power lines
- Automotive and Telecommunication

  Industrial Electronics

Electrical Characteristics (T=25℃)

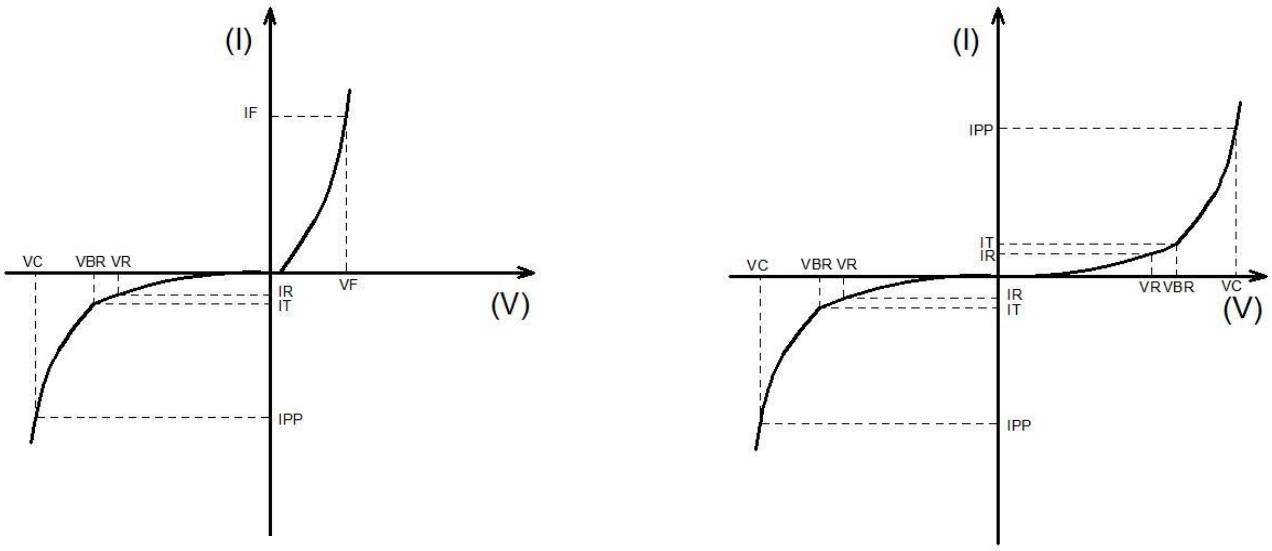
		V_R	I_R@V_R	V_{BR}@I_T		I_T	V_C@I_{PP}	I_{PP}①
P/N	MARK	V	μA	min(V)	max(V)	mA	max(V)	A
SMF3.3A	3.3A	3.3	200	5.2	6	10	8.0	25.00

Absolute Maximum Ratings(T=25ºC, RH=45%-75%, unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak pulse power dissipation on 10/1000μs waveform	P_{PP}	200	W
Steady state power dissipation at T_L=75℃	$P_{M(AV)}$	1.0	W
Operating junction temperature range	T_j	-55 to +125	℃
Storage temperature range	T_{stg}	-55 to +150	℃

Ratings And V-I Characteristics Curves (T=25ºC, unless otherwise noted)

FIG1：V-I cure characteristics



Symbol	Parameter
I_F	Mean Forward Current
V_F	Maximum Forward Voltage @I_F
V_R	Peak Reverse Working Voltage
I_R	Reverse Leakage Current @ V_R
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}

Typical Characteristics

FIG2：Pulse Derating Curve

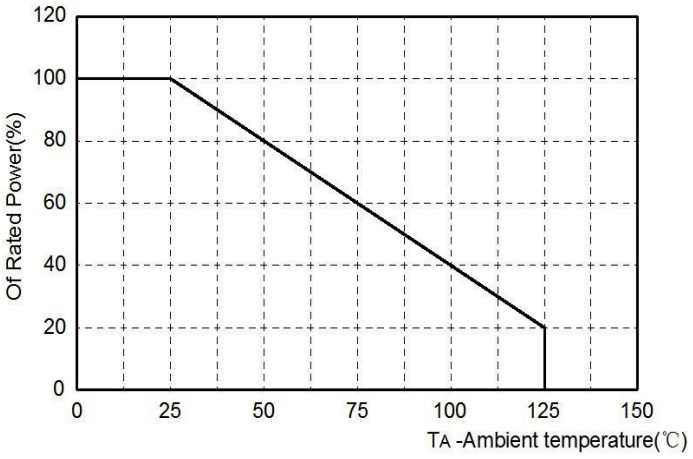


FIG3：Pulse Waveform

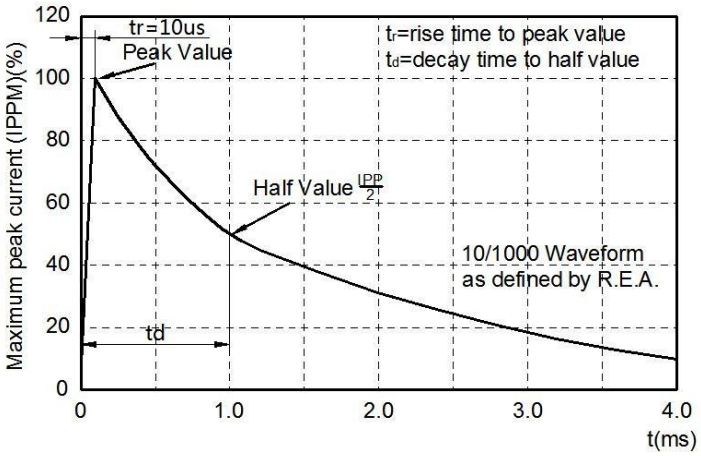


FIG4：Peak Pulse Power Rating Curve

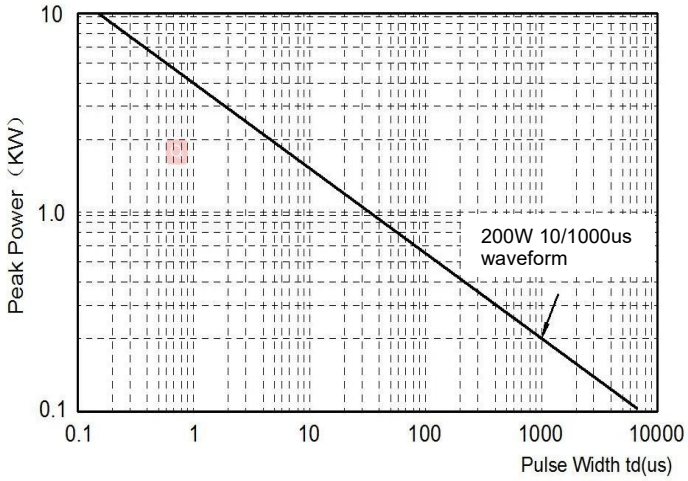
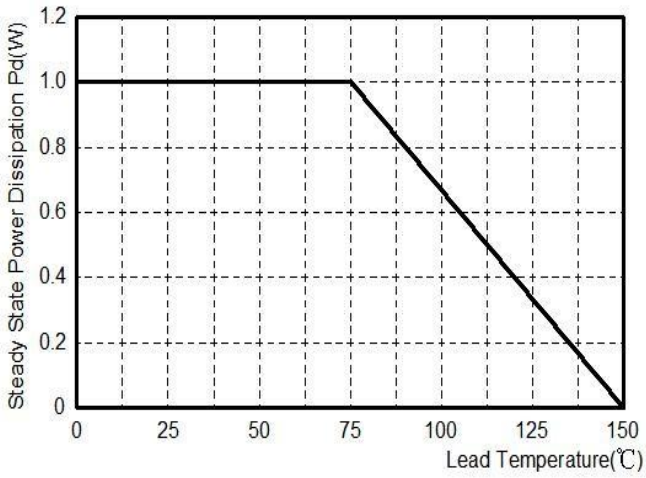
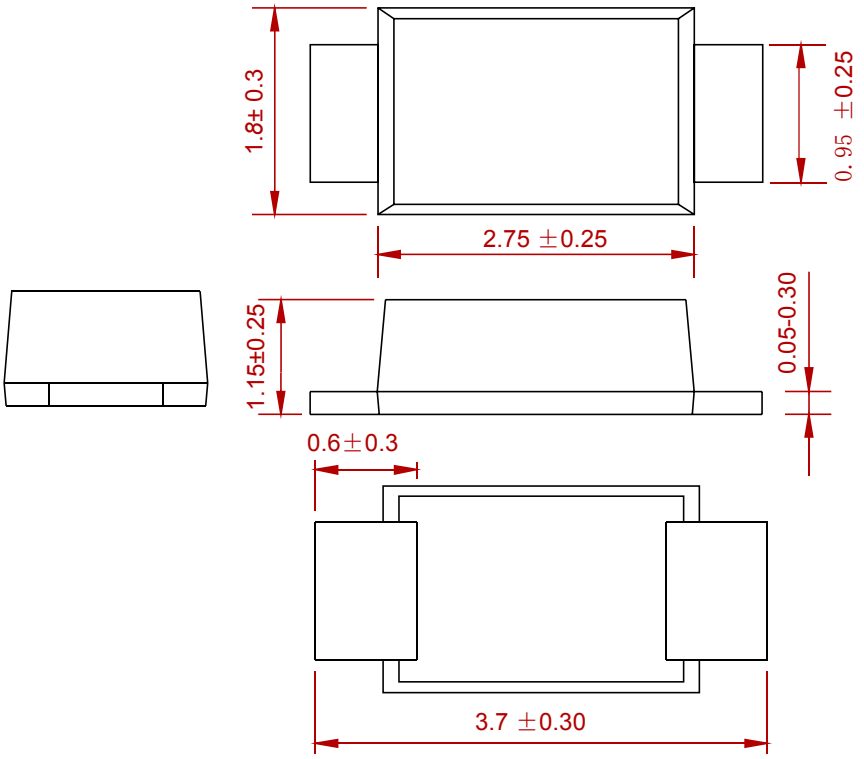


FIG5：Steady State Power Dissipation

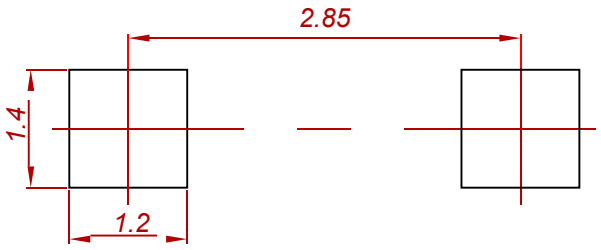


PACKAGE MECHANICAL DATA



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
SMF3.3A	SOD-123FL	3000

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