



## Features

- Small Power Mold Type
- Low  $I_R$
- High Reliability



## Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
SS1FH10-M3/H	SOD-123FL	L1H	3000

SOD-123FL



## Maximum Ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	Limit	Unit
DC reverse voltage	$V_R$	100	V
Mean rectifying current	$I_o$	1	A
Peak Forward Surge Current @t=8.3 ms	$I_{FSM}$	50	A
Thermal Resistance, Junction to Ambient (Note 1)	$R_{\theta JA}$	85	°C/W
Thermal Resistance, Junction to Ambient (Note 2)	$R_{\theta JA}$	330	°C/W
Operating and Storage Temperature Range	$T_{stg}, T_j$	-65~+175	°C

## Electrical Characteristics (Ta=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit	Conditions
Maximum Instantaneous Forward Voltage	$V_F$	0.76 0.84 0.61 0.68	V	$I_F=1A, T_J=25^{\circ}C$ $I_F=2A, T_J=25^{\circ}C$ $I_F=1A, T_J=125^{\circ}C$ $I_F=2A, T_J=125^{\circ}C$
Maximum Instantaneous Reverse Current (Note 3)	$I_R$	40	$\mu A$	Rated dc Voltage, $T_J=25^{\circ}C$
		0.5	mA	Rated dc Voltage, $T_J=125^{\circ}C$

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

1. Mounted with 700 mm<sup>2</sup> copper pad size (Approximately 1 in<sup>2</sup>) 1 oz FR4 Board.
2. Mounted with pad size approximately 20 mm<sup>2</sup> copper, 1 oz FR4 Board.
3. Pulse Test: Pulse Width  $\leq 380 \mu s$ , Duty Cycle  $\leq 2.0\%$ .



## Typical Characteristics

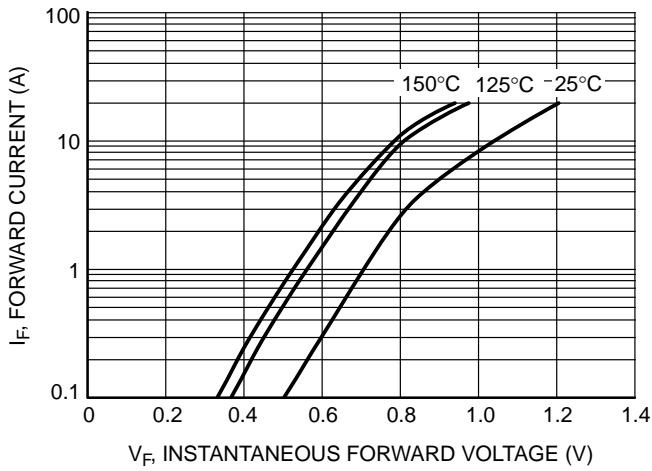


Figure 1. Typical Forward Voltage

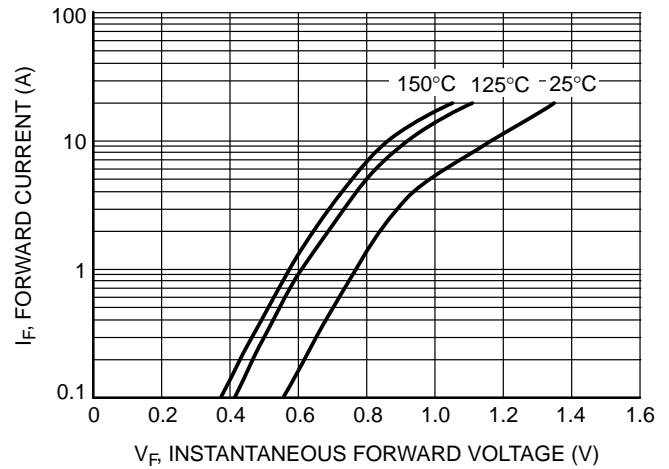


Figure 2. Maximum Forward Voltage

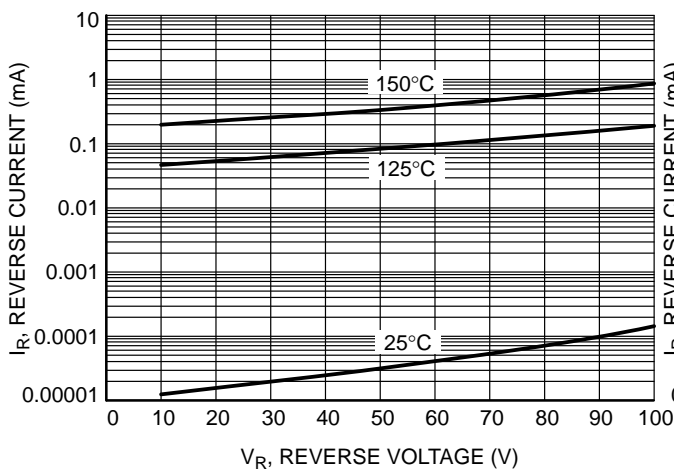


Figure 3. Typical Reverse Current

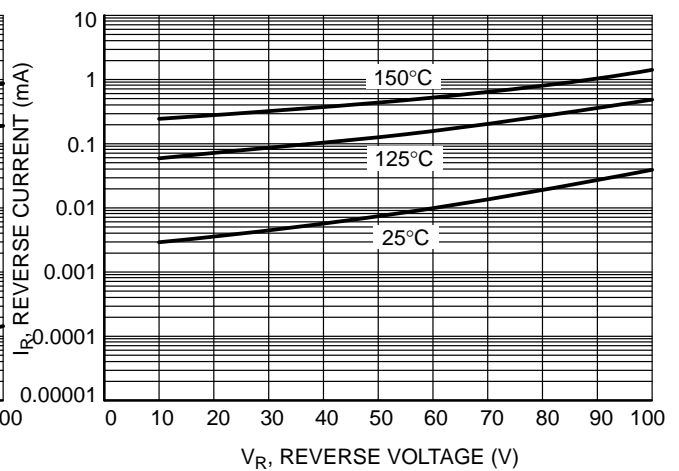


Figure 4. Maximum Reverse Current

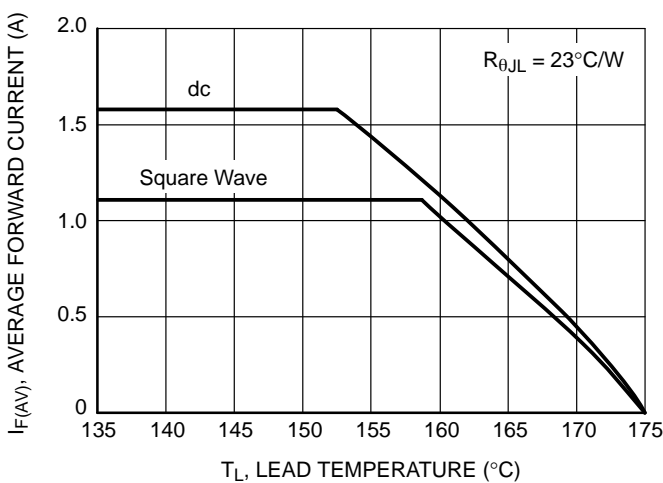


Figure 5. Current Derating

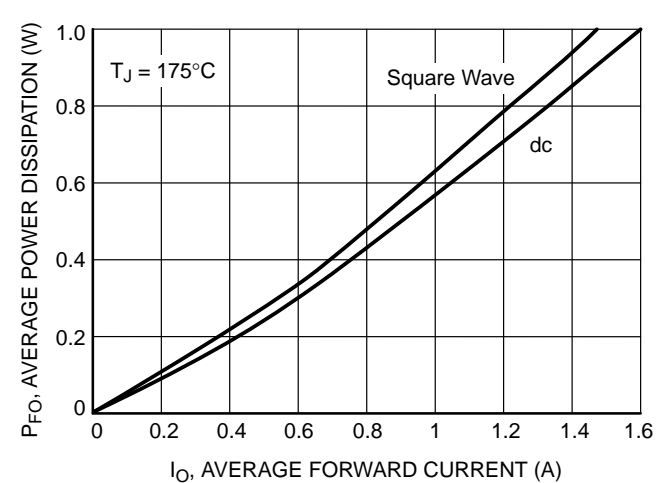
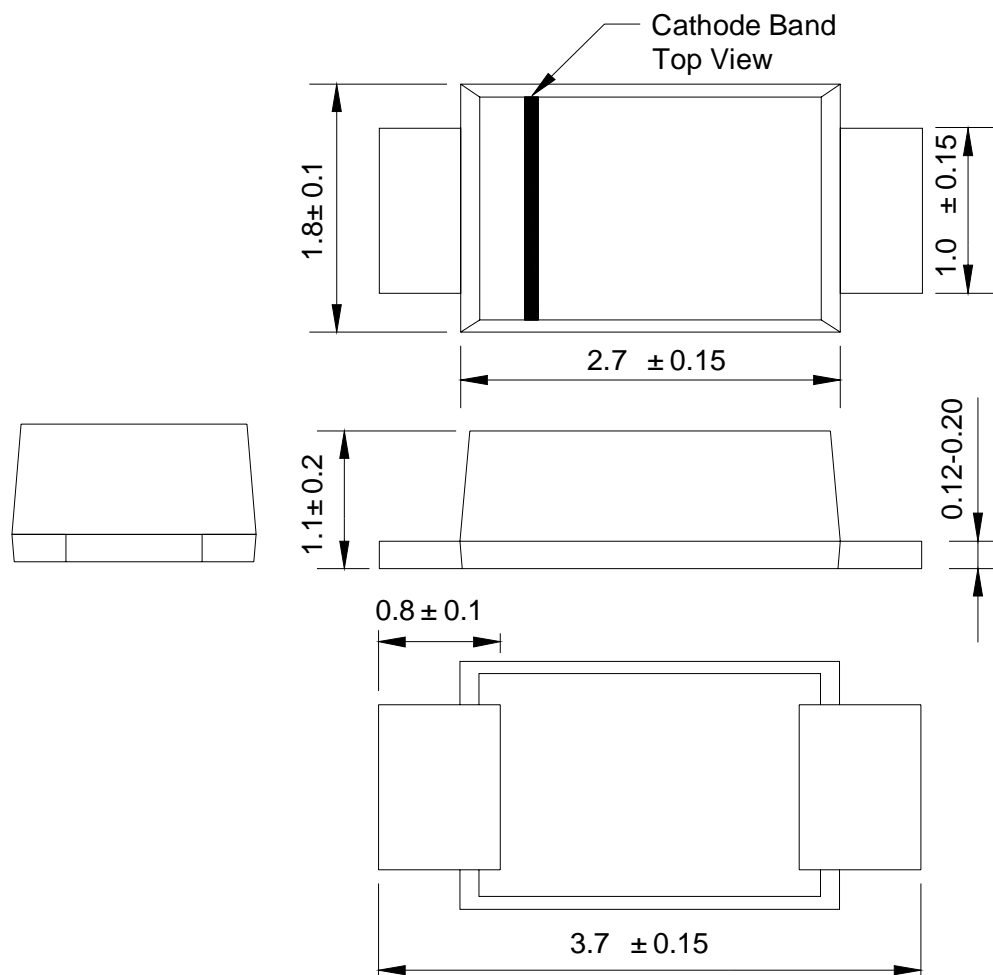


Figure 6. Forward Power Dissipation



**Package Outline Dimensions**  
**SOD-123FL**





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