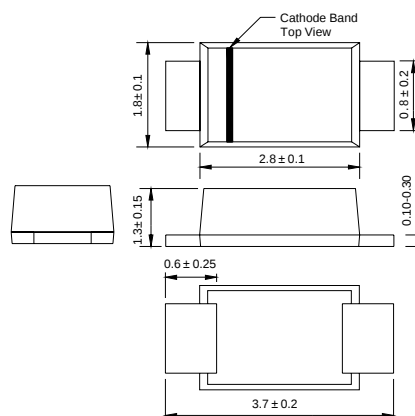




SOD-123FL



Dimensions in millimeters

Features

- Glass passivated junction.
- For surface mounted applications.
- Built in strain relief, ideal for automated placement.

1.0 Ampere Fast Recovery Rectifiers

Absolute Maximum Ratings*

$T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
I_O	Average Rectified Current @ $T_A = 100^\circ\text{C}$	1.0	A
$I_{r(\text{surge})}$	Peak Forward Surge Current 8.3 ms single half-sine-wave Superimposed on rated load (JEDEC method)	30	A
P_D	Total Device Dissipation Derate above 25°C	1.19 9.5	W mW/ $^\circ\text{C}$
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient **	105	$^\circ\text{C/W}$
$R_{\theta JC}$	Thermal Resistance, Junction to Case **	32	$^\circ\text{C/W}$
T_{stg}	Storage Temperature Range	-55 to +150	$^\circ\text{C}$
T_J	Operating Junction Temperature	-55 to +150	$^\circ\text{C}$

*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

**Device mounted on FR-4 PCB 0.013 mm.

Electrical Characteristics

$T_A = 25^\circ\text{C}$ unless otherwise noted

Parameter	Device							Units
	F1	F2	F3	F4	F5	F6	F7	
Peak Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
DC Reverse Voltage (Rated V _R)	50	100	200	400	600	800	1000	V
Maximum Reverse Current @ rated V _R T _A = 25°C T _A = 125°C								μA μA
Maximum Forward Voltage @ 1.0 A	1.3							V
Maximum Reverse Recovery Time I _F = 0.5 A, I _R = 1.0 A, I _{rr} = 0.25 A	150				250	500		nS
Typical Junction Capacitance V _R = 4.0 V, f = 1.0 MHz	10							pF

Typical Characteristics

