



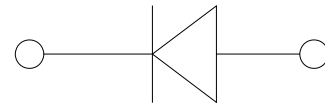
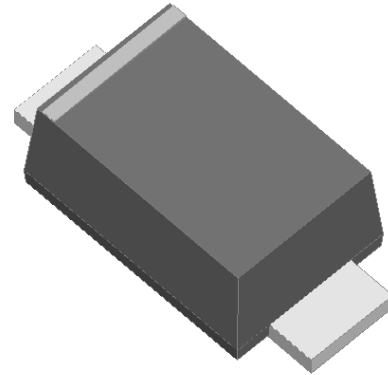
**Rectifier diode**  
**Reverse Voltage 50V-1000v**  
**Forward current-1A**

### Features

- Glass passivated chip
- High surge current capability
- Ideal for surface mounted applications
- Low power loss, high efficiency
- Plastic Case Material has UL Flammability

### Mechanical Data

- Package: SOD123FL
- Terminals: Tin Plated leads, solderable per Mil-STD-750 Method 2026
- Polarity: As marked
- Molding compound meets UL 94 V-0 flammability rating, ROHS-compliant



### Maximum Ratings (Ta=25°C Unless otherwise specified)

Type Number	SYMBOL	S1MD	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	1000	V
Maximum RMS Voltage	$V_{RMS}$	700	V
Maximum DC Blocking Voltage	$V_{DC}$	1000	V
Maximum Average Forward Rectified Current	$I_{O(AV)}$	1.0	A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load (JEDEC Method) on rated	IFSM	30.0	A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C		60.0	A
Current squared time @1ms ≤ t ≤ 8.3ms Tj=25°C, Rating of per diode	$I^2t$	3.7	A <sup>2</sup> S
Maximum Forward Voltage at 1.0A DC	$V_{FM}$	1.1	V
Maximum Reverse Current TA = 25°C	IR	5.0	uA
at Rated DC Blocking Voltage TA = 125°C		100.0	
Typical Thermal Resistance Between junction and operating junction	$R_{QjA}$	75.0	°C/W
Operating Junction Temperature Range	$T_J$	-55to+150	°C
Storage Temperature Range	$T_{STG}$	-55to+150	°C



FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

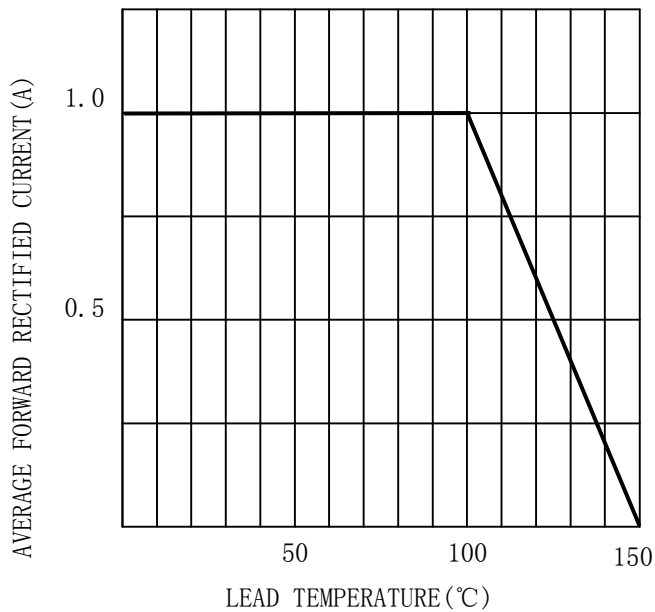


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

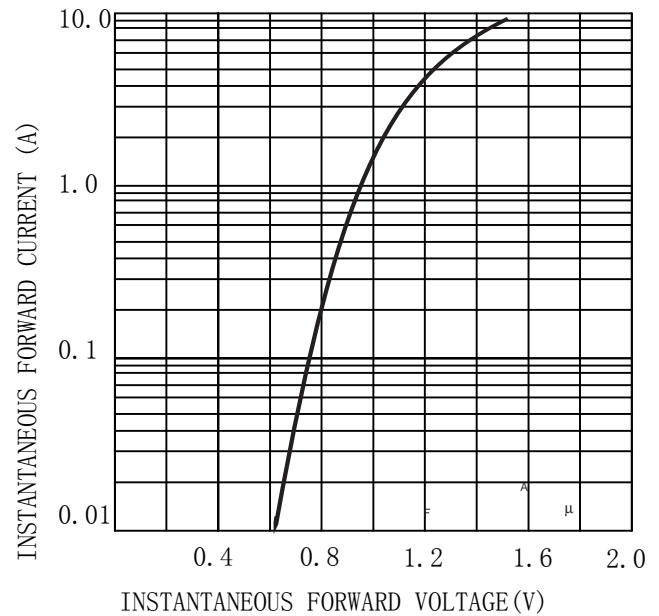


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

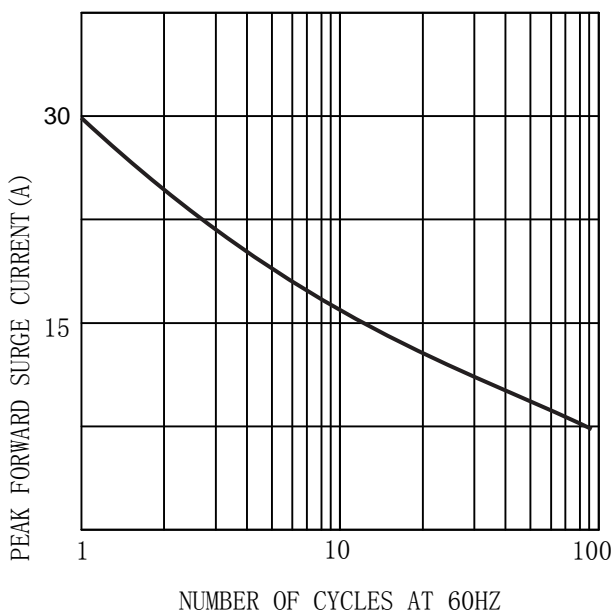
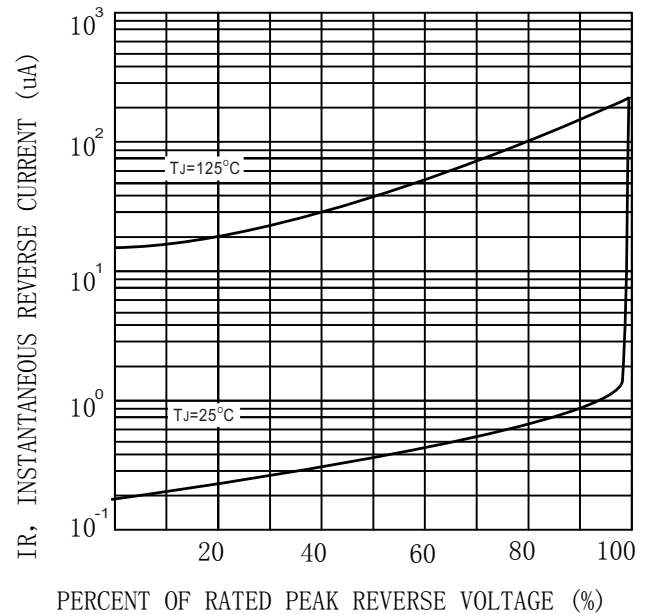



FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)





## MARKING INFORMATION



 = Logo

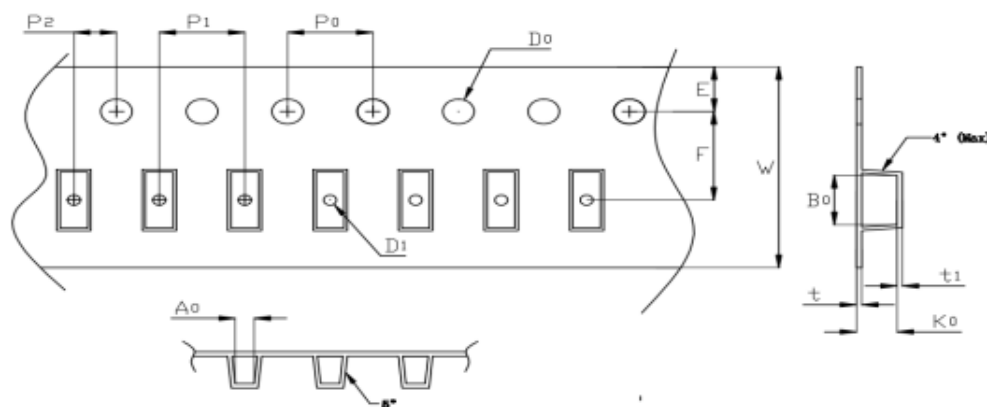
\*\*\*\* = Date Code Marking

S1M = Marking Code

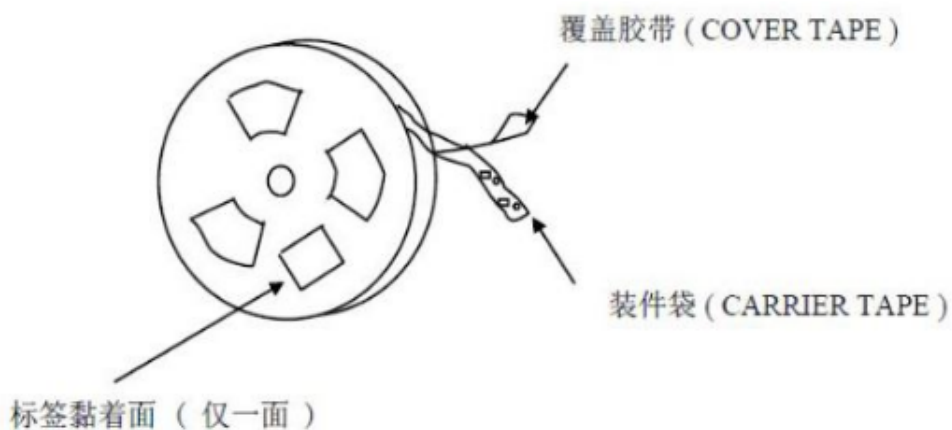
Print according to customer request

## PACKING REQUIRMENTS

- Carrier tape packing



Specifications	Carrier tape type	Ao	Bo	Ko	Po	W	t	Explain
SOD-123FL	Anti-static	1.95±0.10	3.95±0.10	1.35±0.10	4.00±0.10	8.0±0.10	0.23±0.05	

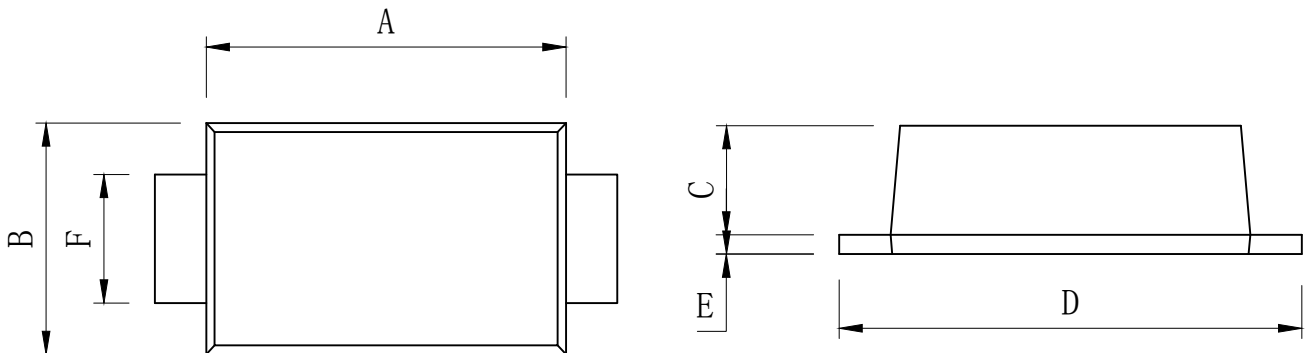


DEVICE TYPE	Tape width	7" Reel		
		Q'TY/REEL (pcs)	BOX/CAR TOON	Q'TY/REEL (pcs)
SOD-123FL	8mm	3000	80	240000



Outline Dimensions

SOD123FL



SOD123FL				
DIM	INC HES		MM	
	MIN	MAX	MIN	MAX
A	0.10	0.12	2.5	3
B	0.06	0.08	1.5	2
C	0.03	0.06	0.7	1.5
D	0.12	0.16	3	4
E	/	0.01	/	0.3
F	0.02	0.06	0.5	1.5



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