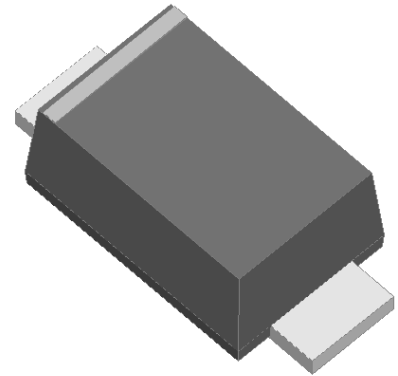




**Ultrafast recovery Rectifier diode**  
**Reverse Voltage 50V-1000V**  
**Forward current-1A**

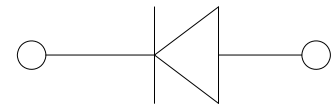
**Features**

- 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	U1							
		A	B	D	G	J	K	M	Umit
Maximum Recurrent 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 TL = 100°C	$I_{O(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated	IFSM	25.0							A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C		50.0							A
Current squared time @1ms≤t8.3≤ms Tj=25°C, Rating of per diode	$i^2t$	2.6							A <sup>2</sup> S
Maximum Forward Voltage at 1.0A DC	$V_{FM}$	1.0		1.3		1.7		V	
Maximum Reverse Current TA = 25°C	IR	5.0							uA
at Rated DC Blocking Voltage TA = 100°C		100.0							
# Maximum reverse recovery time	Trr	50.0				75.0			ns
Typical Junction Capacitance	CJ	17.0							pF
Typical Thermal Resistance Between junction and ambient	$R_{QJa}$	75.0							°C/W
Operating Junction Temperature Range	TJ	-55to+150							°C
Storage Temperature Range	TSTG	-55to+150							°C



FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

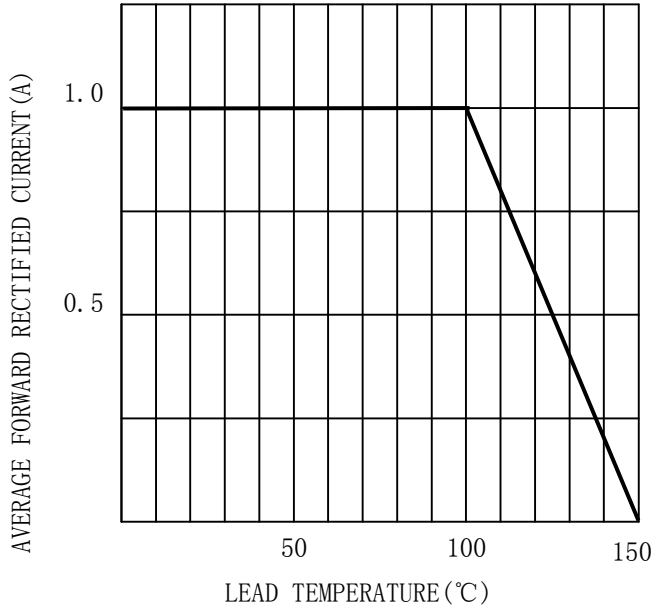


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

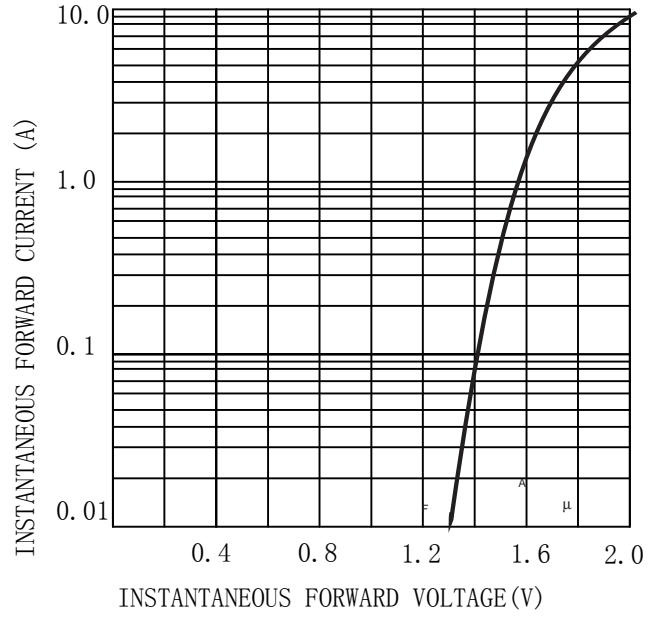


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

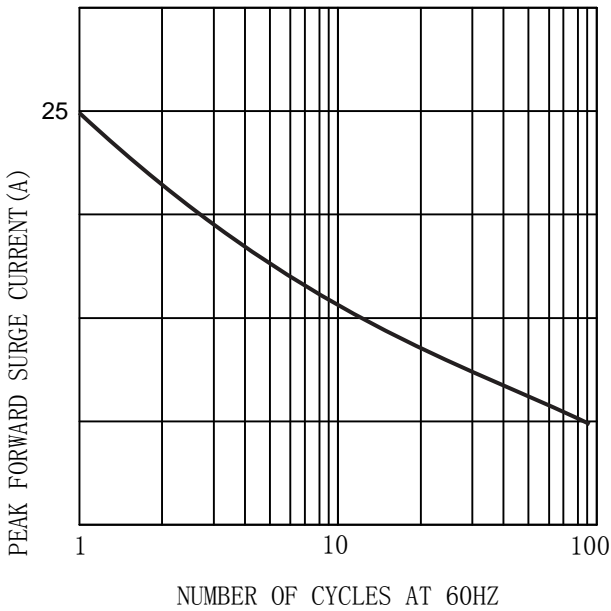
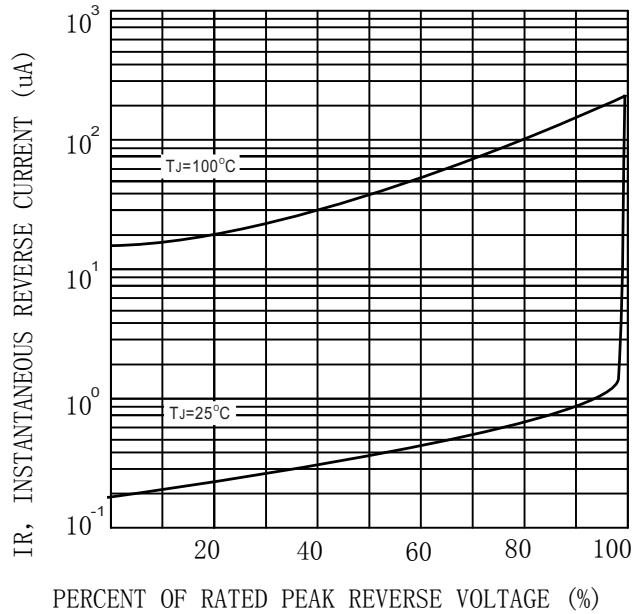



FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)





## MARKING INFORMATION



 = Logo

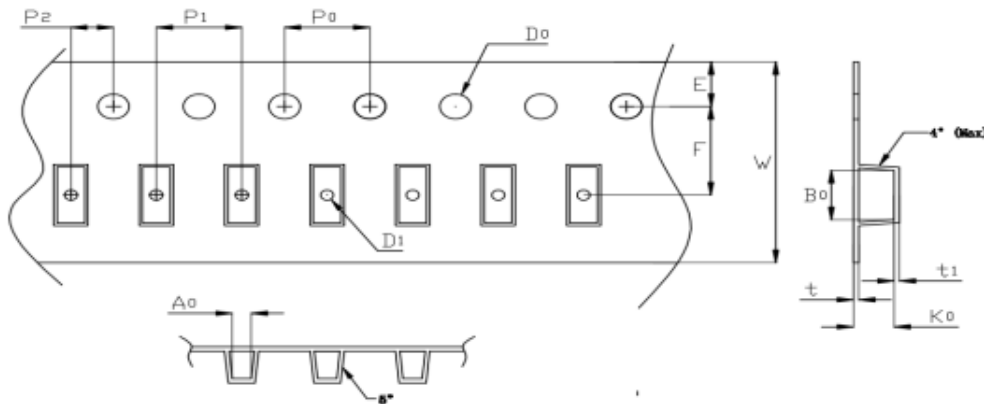
\*\*\*\* = Date Code Marking

U1\* = Marking Code

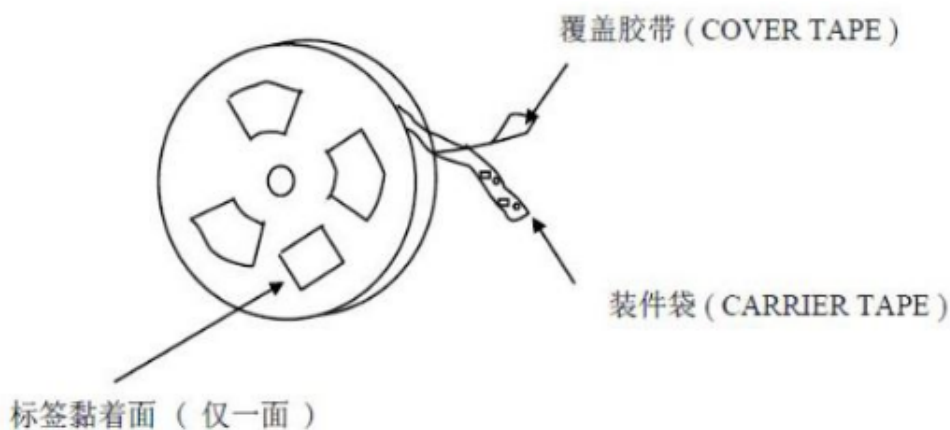
Print according to customer request

## 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	

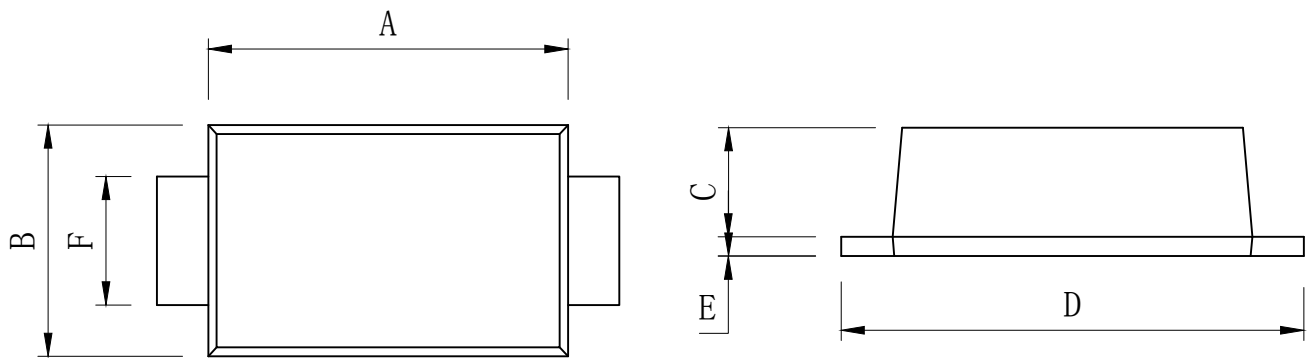


DEVICE TYPE	Tape width	7" Reel		
		Q'TY/REEL (pcs)	BOX/CARTOON	Q'TY/REEL (pcs)
SOD-123FL	8mm	3000	80	240000



## 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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