#### Fast recovery diode Reverse Voltage50V-1000v Forward current-1A

#### **Features**

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

#### Mechanical Data

Package:SOD-123FL

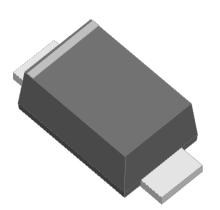
Terminals:Tin Plated leads, solderable per

Mil-STD-750 Method 2026

Polarity: As marked

Molding compound meets UL 94 V-0 flammability rating,

**ROHS-compliant** 





#### Maximum Ratings (Ta=25℃ Unless otherwise specified)

Type Number	SYMBOL	F1	F2	F3	F4	F5	F6	F7	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	IO <sub>(AV)</sub>	1.0				Α			
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated	IFSM	25.0				А			
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25 ℃	ii divi	50.0					Α		
Current squared time @1ms≤t8.3≤ms Tj=25℃, Rating of per diode	l <sup>2</sup> t	2.59				A <sup>2</sup> S			
Maximum Forward Voltage at 1.0A DC	$V_{FM}$	1.3				V			
Maximum Reverse Current TA = 25℃	- IR	5.0			- uA				
at Rated DC Blocking Voltage TA = 125℃	- IK	100.0							
Maximum reverse recovery time	Trr		15	0.0		250.0	50	0.0	ns
Typical Junction Capacitance	CJ	17.0		pF					
Typical Thermal Resistance Between junction and	$R_{QJa}$	75.0				°C/W			
Operating Junction Temperature Range	$T_J$	—55to+150				$^{\circ}$			
Storage Temperature Range	T <sub>STG</sub>	55to+150				$^{\circ}$			

FIG. 1MAXIMUM AVERAGE FORWARD CURRENT DERATING

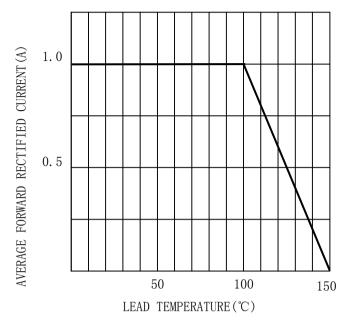


FIG. 2TYPICAL FORWARD CHARACTERISTICS

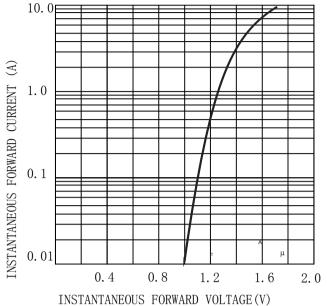


FIG. 3MAXIMUM NON-REPEITIVE SURGE CURRENT

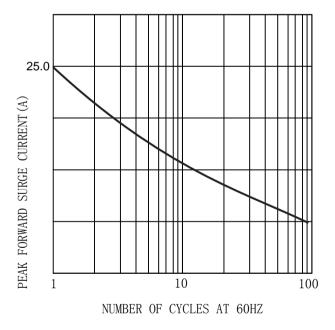
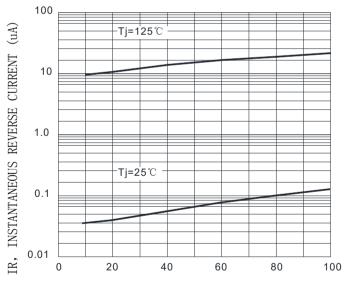


FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)

## **MARKING INFORMATION**



= Logo

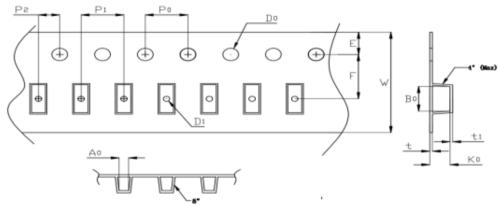
\*\*\*\* = Date Code Marking

F\* = Marking Code

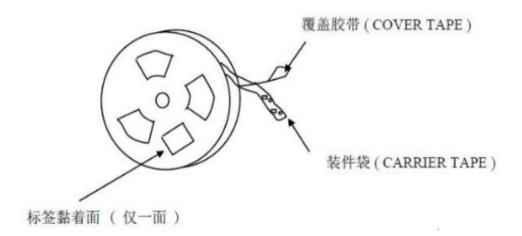
Print according to customer request

## **PACKING REQUIRMENTS**

Carrier tape packing



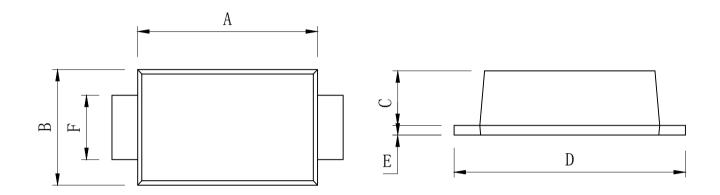
Specificati ons	Carrier tape type	Ao	Во	Ко	Po	W	t	Exiplain
SOD-123FL	Anti-static	1.95± 0.10	3.95± 0.10	1.35± 0.10	$4.00 \pm 0.10$	$8.0 \pm 0.10$	0.23± 0.05	



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

SOD-123FL



SOD-123FL						
DIM	INC	HES	MM			
	MIN	MAX	MIN	MAX		
A	0. 10	0.12	2.5	3		
В	0.06	0.08	1.5	2		
С	0.03	0.06	0.7	1.5		
D	0. 12	0.16	3	4		
Е	/	0.01	/	0.3		
F	0.02	0.06	0.5	1.5		

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