



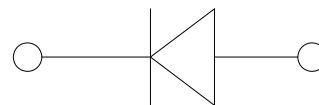
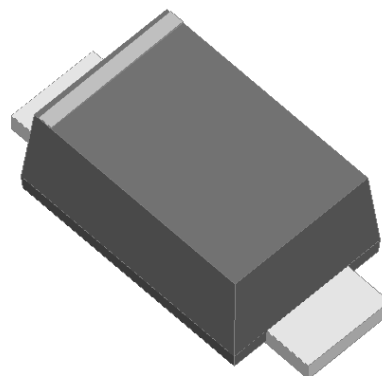
Schottky Diodes
Reverse Voltage-40to200v
Forward current-1A

Features

Schottky chip
Ideal for surface mounted applications
Low forward voltage drop, 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	K120	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	V
Maximum RMS Voltage	V_{RMS}	140	V
Maximum DC Blocking Voltage	V_{DC}	200	V
Maximum Average Forward Rectified Current at $T_L = 100^\circ\text{C}$	$I_{O(AV)}$	1.0	A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated	IFSM	20.0	A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, $T_J=25^\circ\text{C}$		40.0	A
Current squared time @ $1\text{ms} \leq t \leq 8.3\text{ms}$ $T_J=25^\circ\text{C}$, Rating of per diode	I^2t	1.7	A^2S
Maximum Forward Voltage at 1.0A DC	V_{FM}	0.92	V
Maximum Reverse Current $T_A = 25^\circ\text{C}$	IR	0.05	mA
at Rated DC Blocking Voltage $T_A = 100^\circ\text{C}$		5	mA
Typical Thermal Resistance	R_{QJA}	75.0	$^\circ\text{C/W}$
Operating Junction Temperature Range	T_J	$-55\text{to}+150$	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	$-55\text{to}+150$	$^\circ\text{C}$



FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

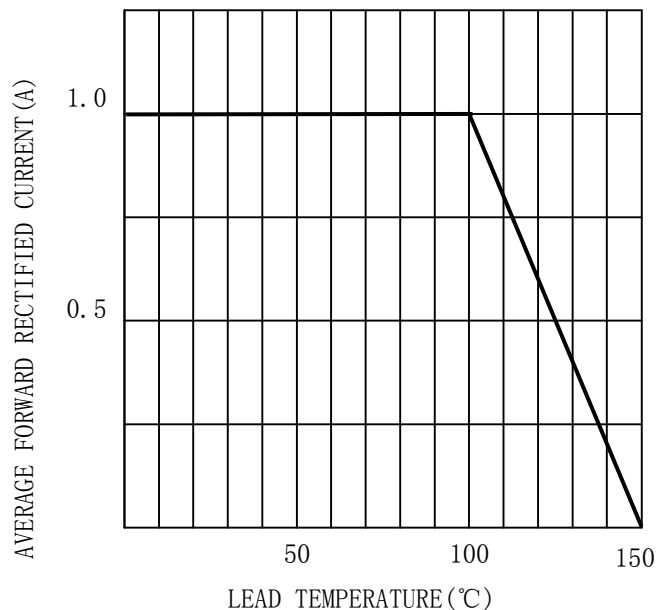


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

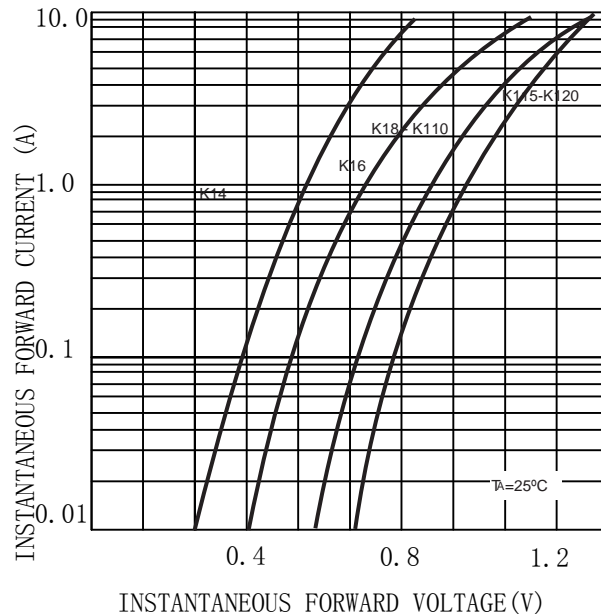


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

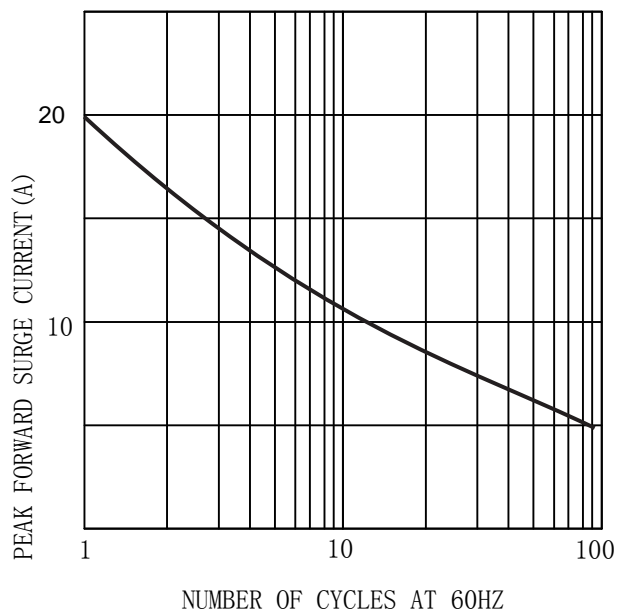
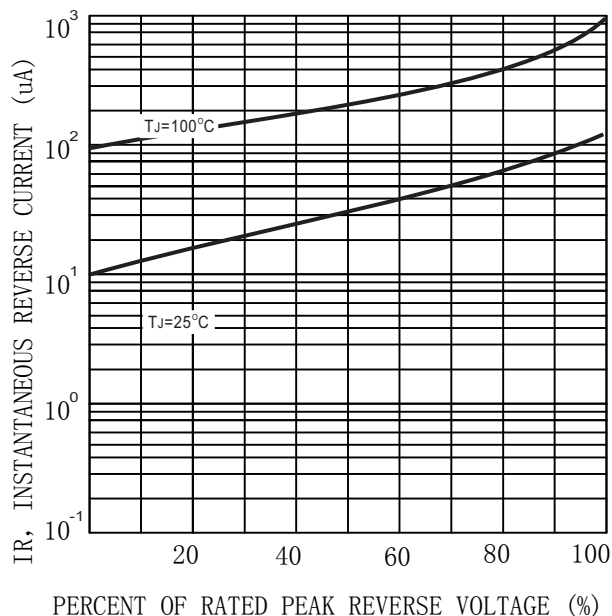
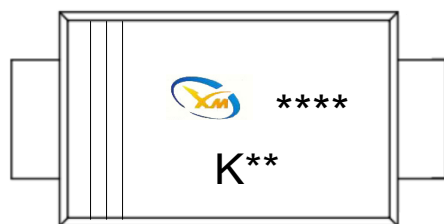



FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)





MARKING INFORMATION



 = Logo

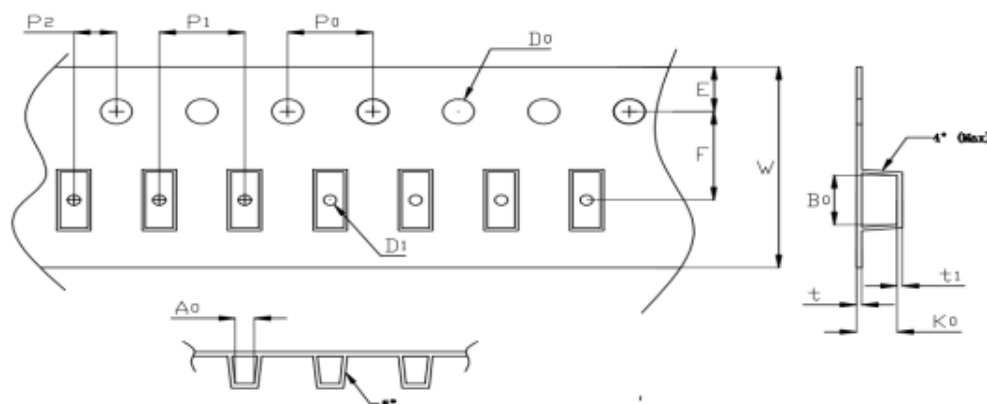
**** = Date Code Marking

K** = Marking Code

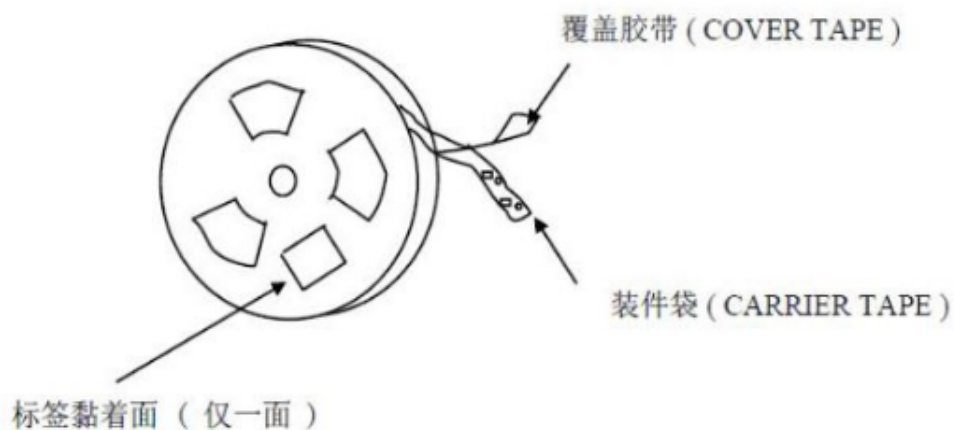
Print according to customer request

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	

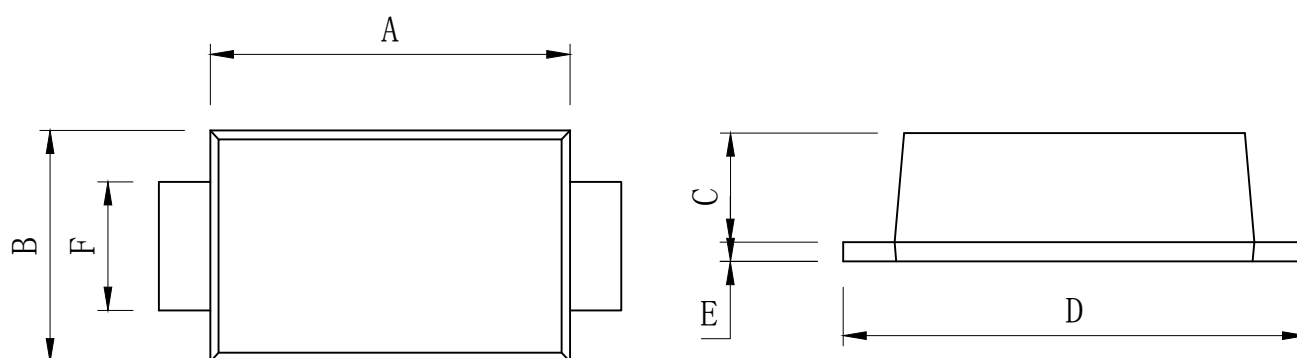


DEVICE TYPE	Tape width	7" Reel		
		Q'TY/REEL (pcs)	BOX/CARTOON	Q'TY/REEL (pcs)
SOD-123FL	8mm	3000	80	240000



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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