

SINLOON®

小型化蕭特基二極管  
Case: SOD-123FL

SS0520FL~SS0540FL  
0.5A Surface Mount Schottky Barrier Diode

**FEATURE:**

- ◆ Fast Switching
- ◆ Low Turn-on Voltage
- ◆ Very small SMD package
- ◆ Designed for Surface Mount Application
- ◆ PN Junction Guard Ring for Transient and ESD Protection.
- ◆ Plastic Material - UL Recognition Flammability Classification 94V-0

**MECHANICAL CHARACTERISTICS:**

- ◆ Case: SOD-123FL Molded Plastic
- ◆ Weight: 0.017 Grams (approx)
- ◆ Marking: Device Part Code
- ◆ Polarity: Cathode Band
- ◆ Terminals: Plated leads solder able per MIL-STD-202, Method 208.
- ◆ Lead Free for Rohm / Lead free version and "LF" suffix to part number.

**DIMENSION:**

Dimension (mm) SOD-123FL		
Dim.	Min.	Max.
A	3.5	3.7
B	2.65	2.95
C	1.65	1.95
D	0.75	1.05
E	0.1	0.2
G	0.98	1.08
H	0.5	0.8

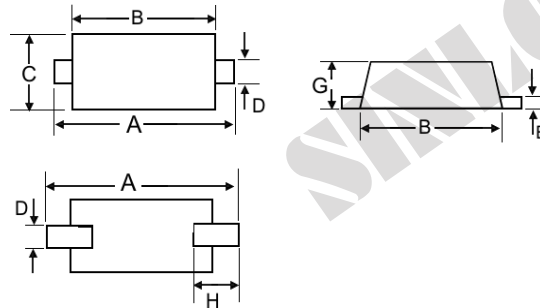


Figure SOD-123FL



**Maximum Ratings @ $T_A=25^\circ\text{C}$  unless otherwise specified**

Characteristic	Part Code	SS0520FL	SS0530FL	SS0840FL	Unit
	Symbol	B02	B03	B04	
DC Blocking Voltage:	$V_R$				
Peak Repetitive Reverse Voltage	$V_{RRM}$	20	30	40	V
Working Peak Reverse Voltage	$V_{RWM}$				
Forward Continuous Current (note 1)	$I_F$	500	500	500	mA
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDC)	$I_{FSM}$		5.5		A
Thermal Resistance, Junction to Ambient (Note 1)	$R_{\theta JA}$		206		$^\circ\text{C}/\text{W}$
Forward Voltage Drop @ $I_F = 0.5\text{A}$	$V_{FM}$		0.52		V
Peak Reverse Leakage Current @ $V_{RRM}$	$I_{RM}$		100		$\mu\text{A}$
Typical Junction Capacitance ( $V_R = 0\text{V DC}$ , $f=1\text{MHz}$ )	$C_j$		170		pF
Operating and Storage Temperature Range	$T_J, T_{STG}$		-65 to +125		$^\circ\text{C}$

Note: 1. Mounted on FR-4 PCB with  $645\text{mm}^2$  pad size.

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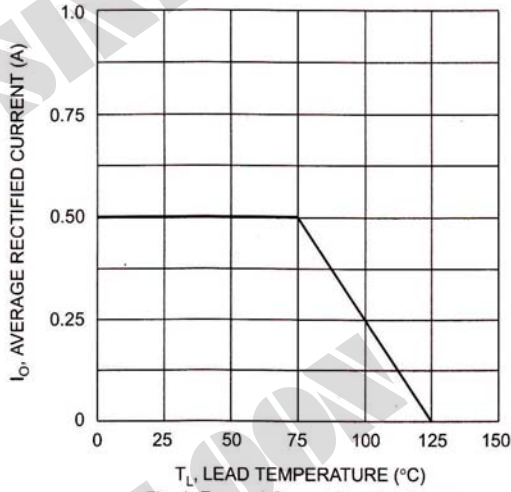


Fig. 1 Forward Current Derating Curve

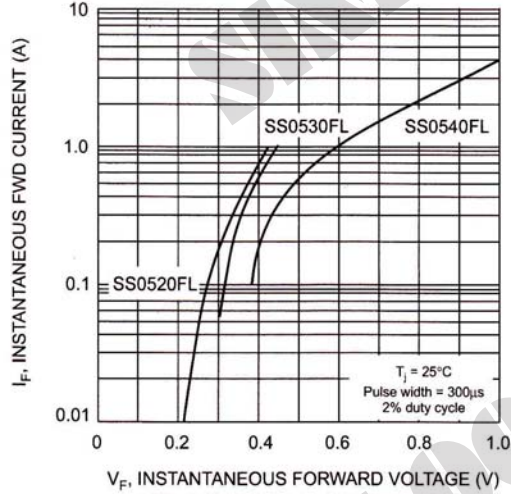


Fig. 2 Typical Forward Characteristics

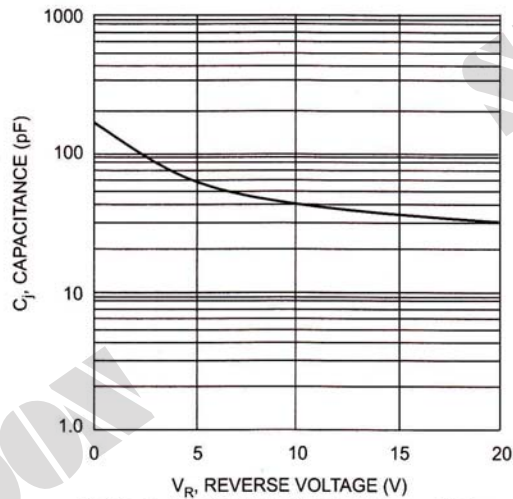


Fig. 3 Typ. Junction Capacitance vs Reverse Voltage

☐ RECOMMENDED SOLDERING PROFILE:

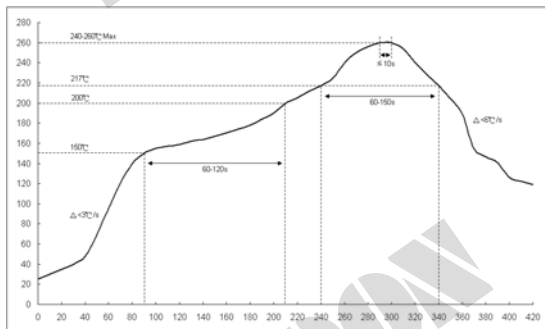


Fig 1: Reflow soldering profile for lead-free solder (SnAgCu)

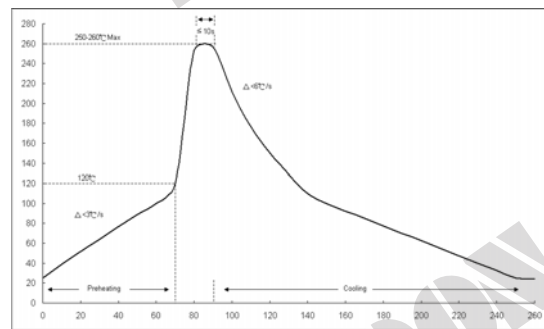


Fig 1: Wave soldering profile.

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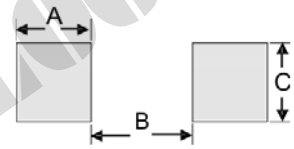
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Case: SOD-123FL

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**RECOMMENDED SOLDERING FOOTPRINT**

TYPE	Dimension inches inches (mm)					
	A		B		C	
SOD-123FL	0.047 in	1.20mm	0.072 in	1.85mm	0.047 in	1.20mm



**MARKING INFORMATION**

Cathode: Polarity Band  
Marking: See part code



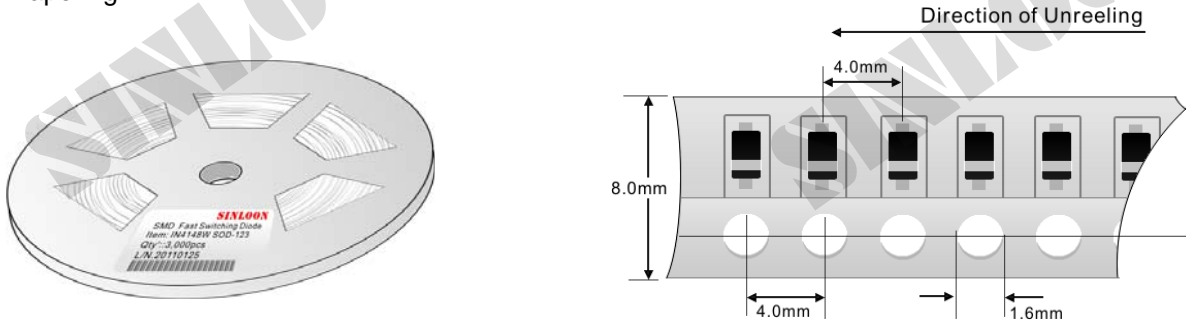
Part No.	Marking
SS0520FL	B02
SS0530FL	B03
SS0540FL	B04

**COMMON PACKING INFORMATION:**

Product Number:	Package Type	Packing Quantity	Carton Quantity	Apporx Gross Weight
SS0520FL~SS0540FL	SOD-123FL	3000 Tape & Reel	150,000 Ctn	10 Kg

Reel Diameter (mm)	Quantity (Pcs)	Inner Box Size (mm)	Carton Size (mm)
178	3000	L: 187 x W:187 x H: 65	L:390 x W:240 x H:420

Reel Tape Fig-1



Inner Box Fig-2



Carrton



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 ※ Mayloon characteristic parameters of electronic product specification changes or updates without prior notice。