

SINLOON®

小型化蕭特基二極管

Case: SOD-123FL

SS1020FL-SS10100FL

1A 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	3.50	3.7
B	2.65	2.95
C	1.65	1.95
D	0.75	1.05
E	0.1	0.20
G	0.98	1.08
H	0.5	0.8

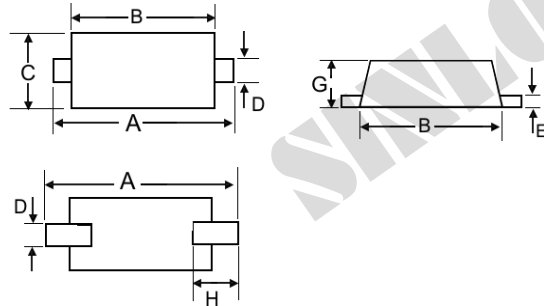
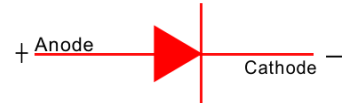


Figure: SOD-123FL



Maximum Ratings @T<sub>A</sub>=25°C unless otherwise specified

Characteristic	Part Code	SS 1020FL	SS 1030FL	SS 1040FL	SS 1060FL	SS 10100FL	Unit	
	Symbol	G2	G3	G4	G6	G10		
DC Blocking Voltage:	V <sub>R</sub>							
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	20	30	40	60	100	V	
Working Peak Reverse Voltage	V <sub>RWM</sub>							
Forward Continuous Current (note 1)	I <sub>F</sub>	1.0	1.0	1.0	1.0	1.0	A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC)	I <sub>FSM</sub>	25	25	25	25	25	A	
Thermal Resistance, Junction to Ambient (Note 1)	R <sub>θJA</sub>	85	85	85	85	85	°C/W	
Forward Voltage Drop @I <sub>F</sub> = 0.5A	V <sub>FM</sub>	0.52	0.55	0.55	0.7	0.85	V	
Peak Reverse Leakage Current @V <sub>RRM</sub>	I <sub>RM</sub>	100						μA
Typical Junction Capacitance (V <sub>R</sub> = 0V DC, f=1MHz)	C <sub>j</sub>	50						pF
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +125						°C

- Note:
1. Mounted on FR-4 PCB with 645mm<sup>2</sup> pad size.
  2. Measured at 1.0MHz and applied reverse voltage of 4V D.C.

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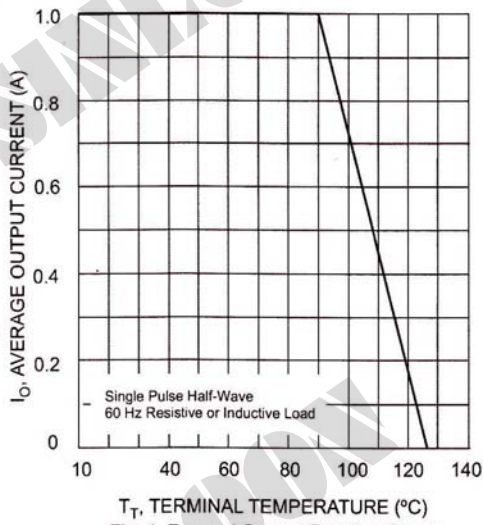


Fig. 1 Forward Current Derating Curve

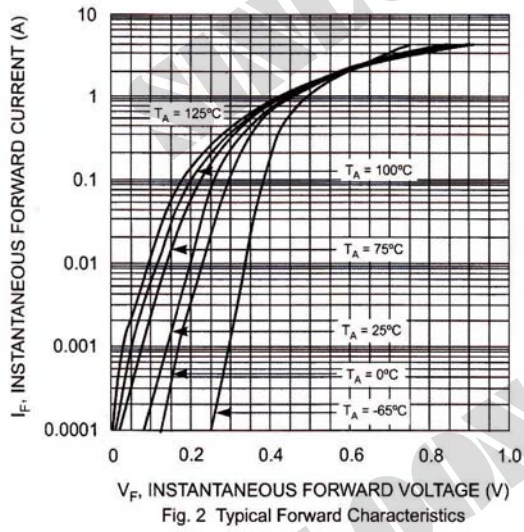


Fig. 2 Typical Forward Characteristics

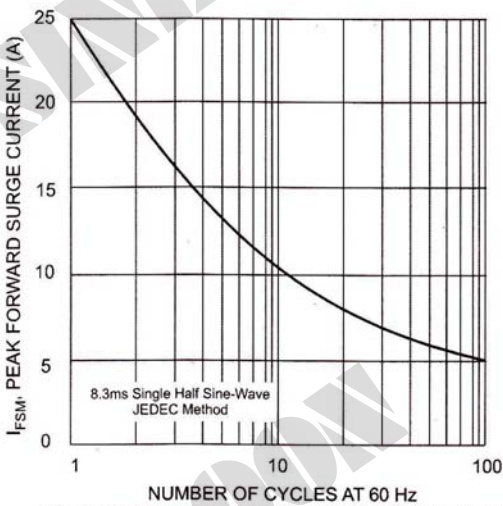


Fig. 3 Maximum Non-Repetitive Peak Fwd Surge Current

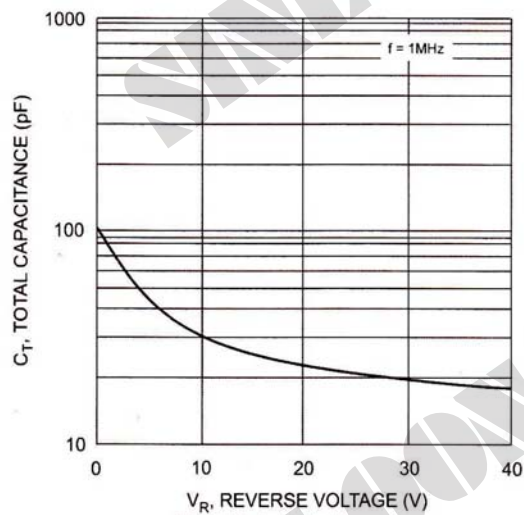


Fig. 4 Typical Total Capacitance

RECOMMENDED SOLDERING PROFILE:

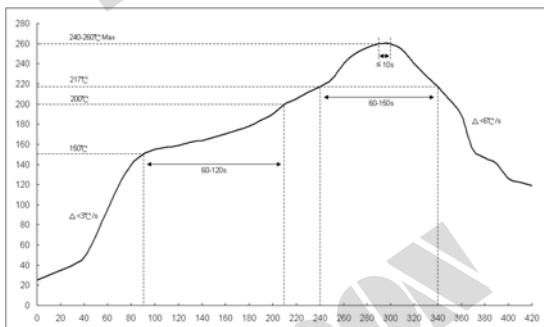


Fig 1: Reflow soldering profile for lead-free solder (SnAgCu)

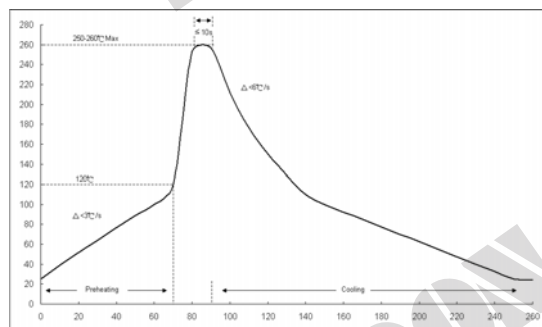


Fig 1: Wave soldering profile.

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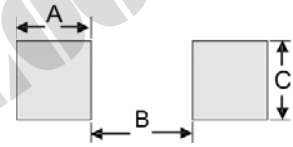
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**Case: SOD-123FL**

**SS1020FL-SS10100FL**

**1A Surface Mount Schottky Barrier Diode**

**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



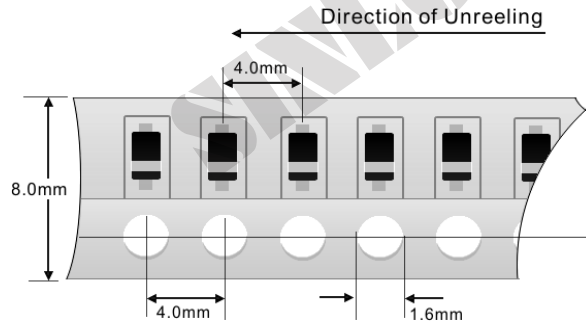
Part No.	Marking
SS1020FL	G2
SS1030FL	G3
SS1040FL	G4
SS1060FL	G6
SS10100FL	G10

**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)	Quantity	Carton Size (mm)
178	3000	L: 187 x W:187 x H: 65	15,000pcs	L:390 x W:240 x H:420

Reel Tape Fig-1



Inner Box Fig-2



Carton



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