

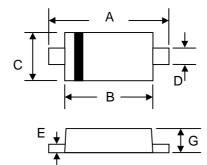
# SS0520FL - SS0540FL



# SURFACE MOUNT SCHOTTKY BARRIER DIODE

#### **Features**

- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- Designed for Surface Mount Application
- Plastic Material UL Recognition Flammability Classification 94V-O



SOD-123FL					
Dim	Min	Max			
Α	3.50	3.70			
В	2.65	2.95			
С	1.65	1.95			
D	0.75	1.05			
E	0.10	0.20			
G	0.98	1.08			
Н	0.50	0.80			
All Dimensions in mm					

## **Mechanical Data**

• Case: SOD-123FL, Molded Plastic

 Terminals: Plated Leads Solderable per MIL-STD-202, Method 208

Polarity: Cathode Band

Weight: 0.017 grams (approx.)

Marking: SS0520FL B02

SS0530FL B03 SS0540FL B04

Lead Free: For RoHS / Lead Free Version,
Add "-LF" Suffix to Part Number, See Page 4

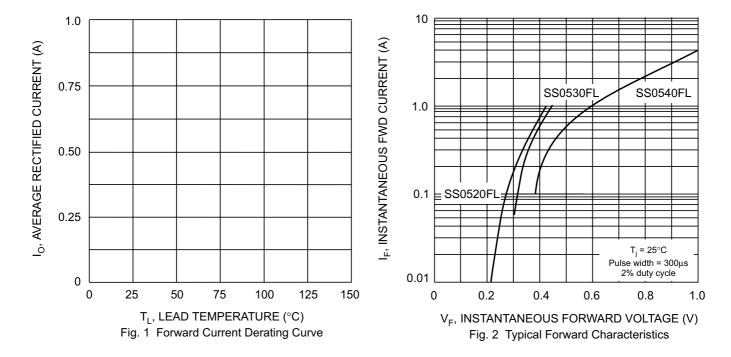
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Characteristic	Symbol	SS0520FL	SS0530FL	SS0540FL	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	20	30	40	V
Forward Continuous Current (Note 1)	lF		500		mA
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	lfsм	20			A
Power Dissipation (Note 1)	Pd	410			mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta}$ JA	206		°C/W	
Operating and Storage Temperature Range	Тj, Тsтg	-65 to +125			°C

## Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

Characteristic		Symbol	SS0520FL	SS0530FL	SS0540FL	Unit
Forward Voltage Drop	@IF = 0.1A / 0.5A	VFM	0.3 / 0.385	0.375 / 0.43	<b>—</b> / 0.51	V
Peak Reverse Leakage Current @VR = 50% / 100% DC Blocking Voltage		lкм	75 / 250	20 / 130	10 / 20	μΑ
Typical Junction Capacitance (VR = 0V DC, f = 1MHz)		Cj	170			pF

Note: 1. Valid provided that terminals are kept at ambient temperature.



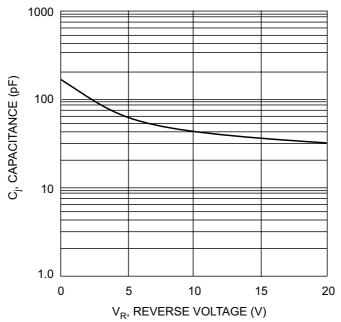
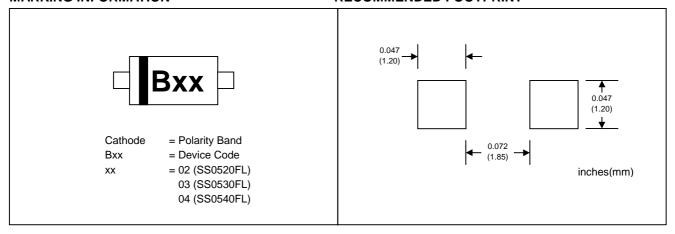


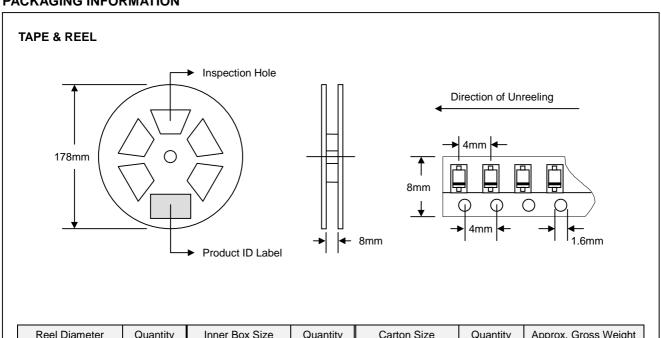
Fig. 3 Typ. Junction Capacitance vs Reverse Voltage

## **MARKING INFORMATION**

## **RECOMMENDED FOOTPRINT**



#### **PACKAGING INFORMATION**



Reel Diameter (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
178	3,000	187 x 187 x 65	15,000	390 x 240 x 420	150,000	10.0

Note: 1. Anti-static plastic reel, white, water clear or blue color. Inspection hole might be varied in different alignment.

2. Components are packed in accordance with EIA standard 481-1 and 481-2.

#### **ORDERING INFORMATION**

Product No.	Package Type	Shipping Quantity		
SS0520FL-T1	SOD-123FL	3000/Tape & Reel		
SS0530FL-T1	SOD-123FL	3000/Tape & Reel		
SS0540FL-T1	SOD-123FL	3000/Tape & Reel		

- Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
- To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, SS0520FL-T1-LF.

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**WARNING**: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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