



# SS1020FL~SS10200FL

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

**VOLTAGE** 20 to 200 Volt **CURRENT** 1 Ampere

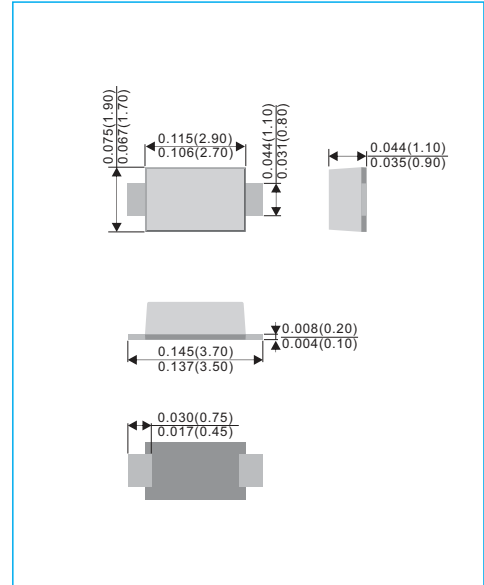
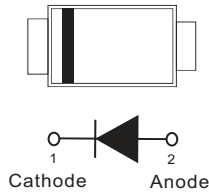
**SOD-123FL** Unit : inch(mm)

### FEATURES

- Fast switching speed
- Surface mount package ideally suited for automatic insertion
- Low power loss, high efficiency
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### MECHANICAL DATA

- Case: SOD-123FL, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Apporx. Weight: 0.0006 ounces, 0.0173 grams
- Polarity: Color band denotes cathode end



### ABSOLUTE RATINGS (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	SS1020FL	SS1030FL	SS1040FL	SS1060FL	SS10100FL	SS10150FL	SS10200FL	UNITS
Marking Code	-	G2	G3	G4	G6	G10	G15	G20	-
Reverse Voltage	V <sub>R</sub>	20	30	40	60	100	150	200	V
Peak Reversr Voltage	V <sub>RRM</sub>	20	30	40	60	100	150	200	V
Average Rectified Current	I <sub>F(AV)</sub>	1							A
Forward Current RMS, D=0.5	I <sub>F(RMS)</sub>	2							A
Non-repetitive Peak Forward Surge Current at t=8.3ms	I <sub>FSM</sub>	40					30		A

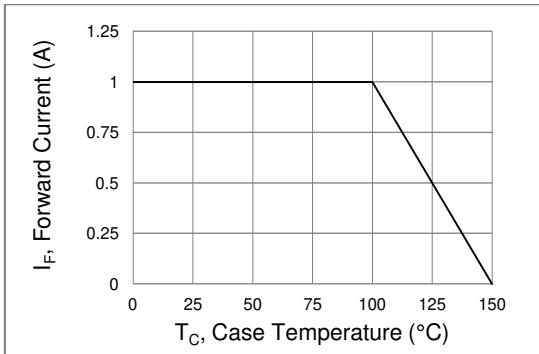
### ELECTRICAL AND THERMAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	SS1020FL	SS1030FL	SS1040FL	SS1060FL	SS10100FL	SS10150FL	SS10200FL	UNITS
Minimum Reverse Breakdown Voltage at I <sub>R</sub> =500μA	V <sub>R</sub>	20	30	40	60	100	150	200	V
Maximum Forward Voltage at I <sub>F</sub> =1A	V <sub>F</sub>	0.55			0.7	0.8	0.85		V
Reverse Leakage Current at V <sub>RRM</sub>	I <sub>R</sub>	30							μA
Typical Thermal Resistance (Note 1) (Note 2)	R <sub>θJC</sub> R <sub>θJA</sub>	32				200			°C/W
Typical Junction Capacitance Rating at V <sub>R</sub> =0V	C <sub>J</sub>	155			125	100	85		pF
Operating Junction Temperature and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150							°C

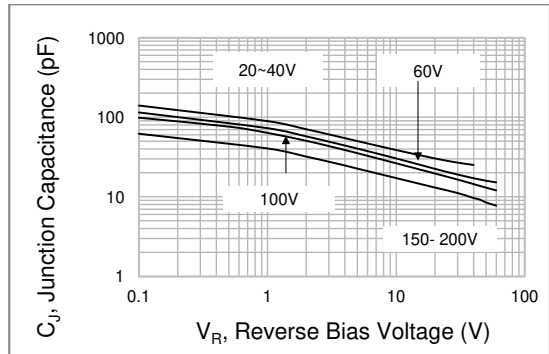
Note:1.Mounted on a FR4 PCB, single-sided copper, with 100cm<sup>2</sup> copper pad area  
2.Mounted on a FR4 PCB, single-sided copper, mini pad.



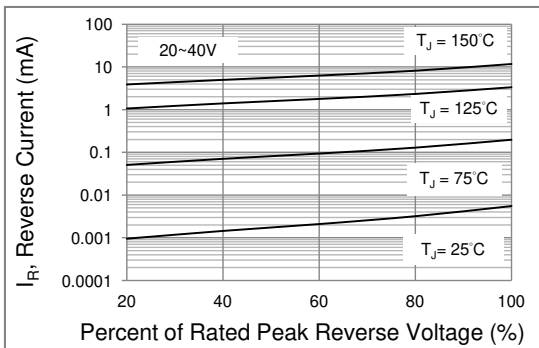
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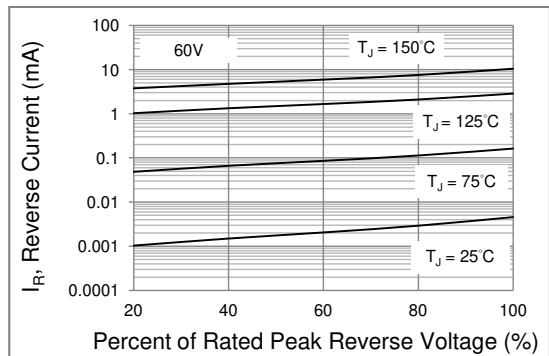
**Fig.1 Forward Current Derating Curve**



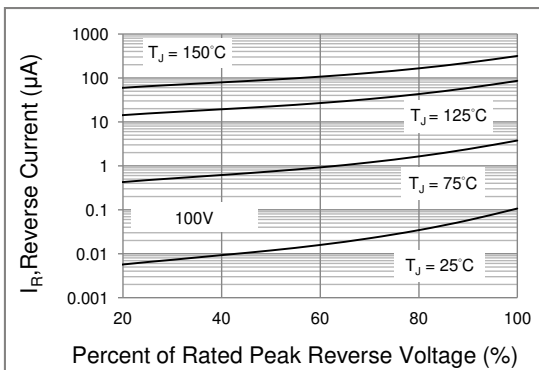
**Fig.2 Typical Junction Capacitance**



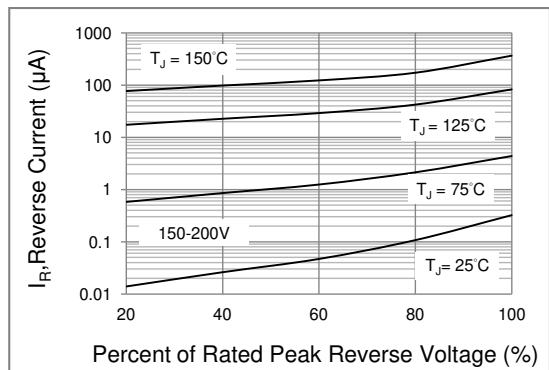
**Fig.3 Typical Reverse Characteristics**



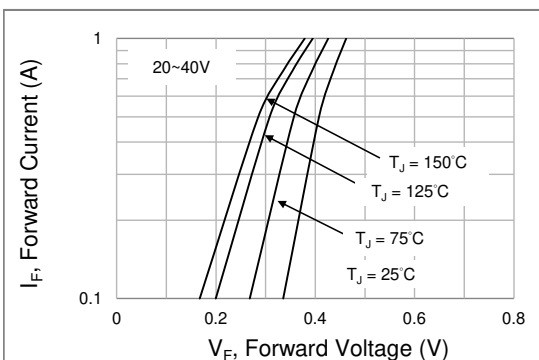
**Fig.4 Typical Reverse Characteristics**



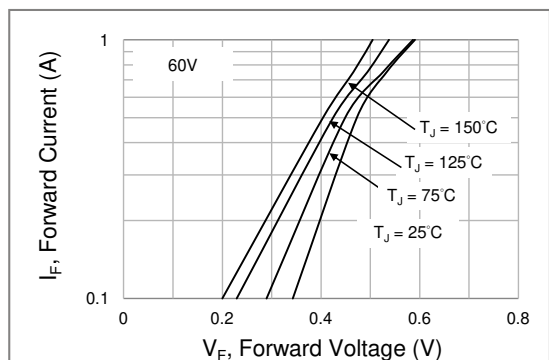
**Fig.5 Typical Reverse Characteristics**



**Fig.6 Typical Reverse Characteristics**



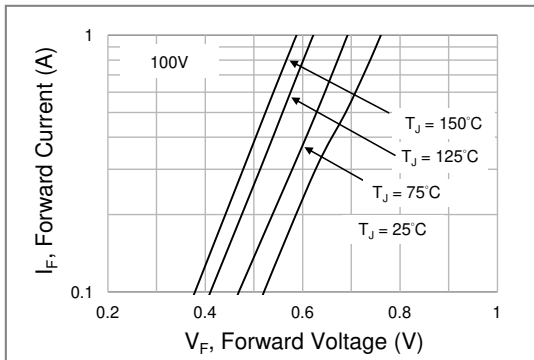
**Fig.7 Typical Forward Characteristics**



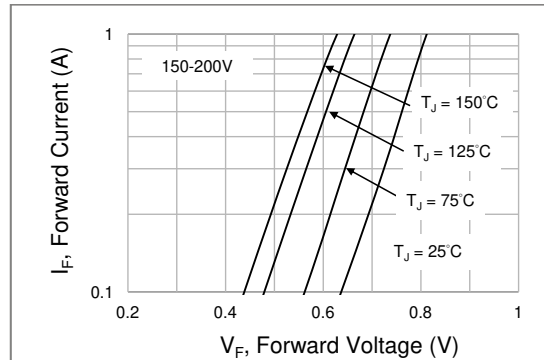
**Fig.8 Typical Forward Characteristics**



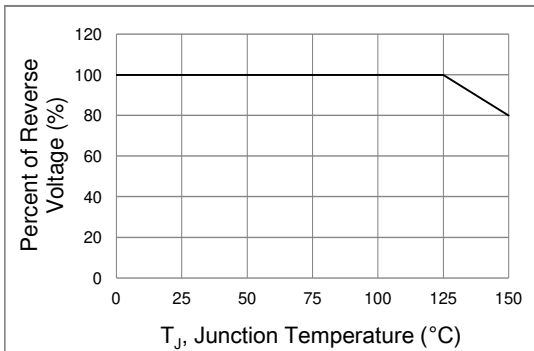
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**Fig.9 Typical Forward Characteristics**



**Fig.10 Typical Forward Characteristics**

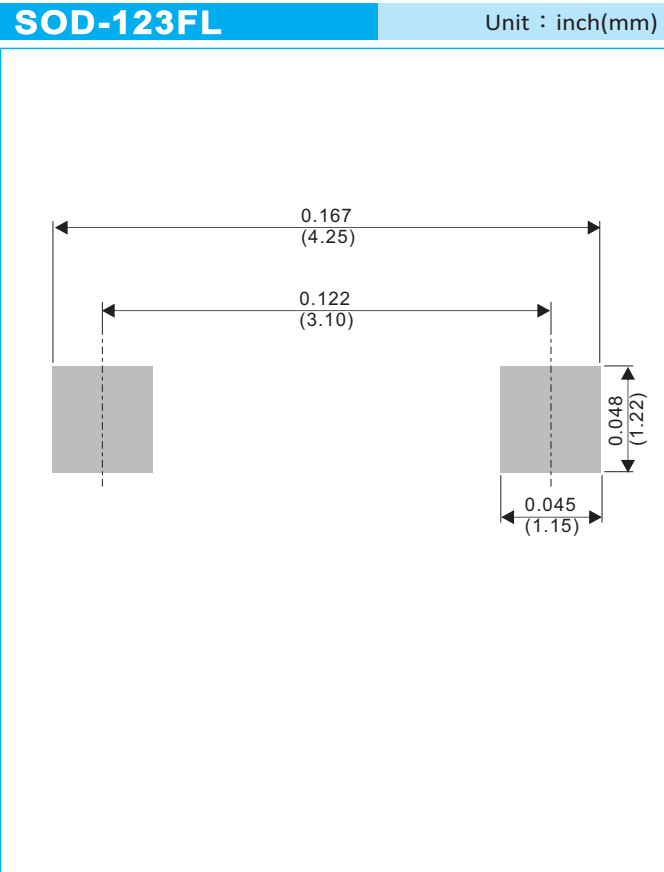


**Fig.11 Operating Temperature Derating Curve**



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information
  - T/R - 10K per 13" plastic Reel
  - T/R - 3K per 7" plastic Reel



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## Part No\_packing code\_Version

SS1020FL\_R1\_00001

SS1020FL\_R2\_00001

For example :

**RB500V-40** **R2** **00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
Bulk Packing (B/P)	<b>B</b>	13"	<b>2</b>			
Tube Packing (T/P)	<b>T</b>	26mm	<b>X</b>			
Tape and Reel (Right Oriented) (TRR)	<b>S</b>	52mm	<b>Y</b>			
Tape and Reel (Left Oriented) (TRL)	<b>L</b>	PANASERT T/B CATHODE UP (PBCU)	<b>U</b>			
FORMING	<b>F</b>	PANASERT T/B CATHODE DOWN (PBCD)	<b>D</b>			



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