



#### SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

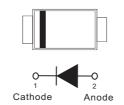
VOLTAGE 20 to 200 Volt CURRENT 1 Ampere

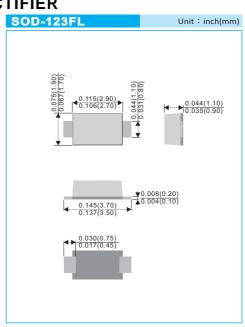
#### **FEATURES**

- · 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 (TA=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	٧
Peak Reversr Voltage	V <sub>RRM</sub>	20	30	40	60	100	150	200	٧
Average Rectified Current	I <sub>F(AV)</sub>	1							А
Forward Current RMS, D=0.5	I <sub>F(RMS)</sub>	2						А	
Non-repetitive Peak Forward Surge Current at t=8.3ms	I <sub>FSM</sub>	40 30						0	А

#### ELECTRICAL AND THERMAL CHARACTERISTICS (TA=25°C unless otherwise noted)

			Γ	I					
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 F=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						μΑ	
Typical Thermal (Note 1) Resistance (Note 2)	$R_{_{ ext{ hetaJC}}}$		32 200						
Typical Junction Capacitance Rating at V <sub>R</sub> =0V	C <sub>J</sub>	155			125	100	8	5	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.





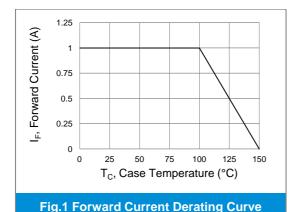


Fig.2 Typical Junction Capacitance

V<sub>R</sub>, Reverse Bias Voltage (V)

20~40V

100V

60V

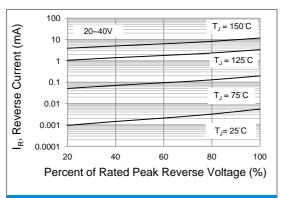
150- 200V

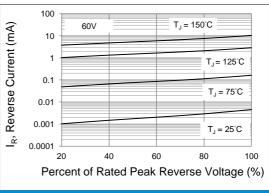
C<sub>J</sub>, Junction Capacitance (pF)

100

10

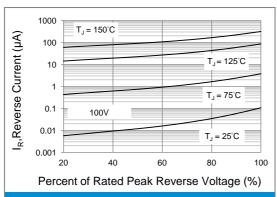
0.1

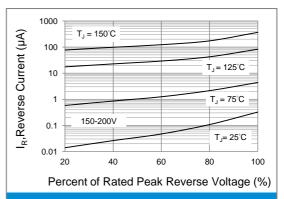




**Fig.3 Typical Reverse Characteristics** 

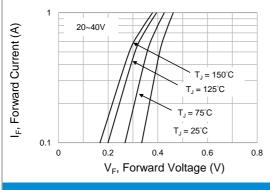






**Fig.5 Typical Reverse Characteristics** 





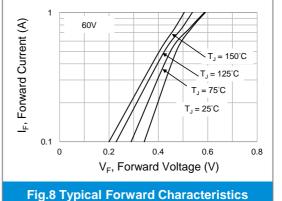


Fig.7 Typical Forward Characteristics





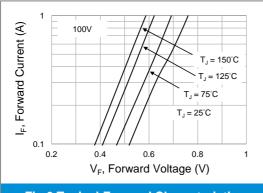
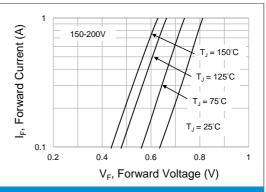
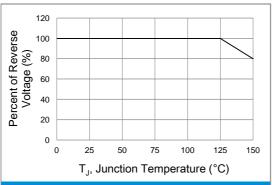


Fig.9 Typical Forward Characteristics



**Fig.10 Typical Forward Characteristics** 

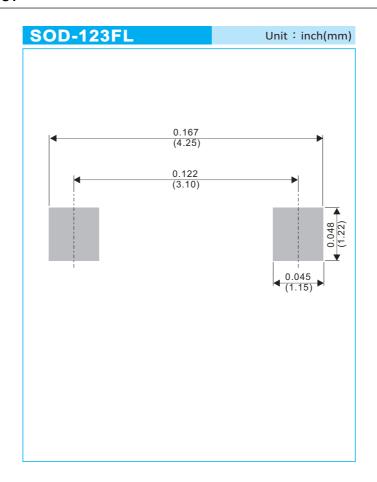


**Fig.11 Operating Temperature Derating Curve** 





#### **MOUNTING PAD LAYOUT**



#### **ORDER INFORMATION**

• Packing information

T/R - 10K per 13" plastic Reel

T/R - 3K per 7" plastic Reel

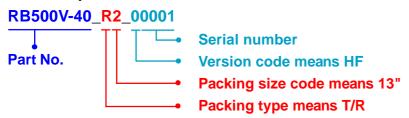




### Part No\_packing code\_Version

SS1020FL\_R1\_00001 SS1020FL\_R2\_00001

### For example:



	Version Code XXXXX					
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)	Α	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	В	13"	2			
Tube Packing (T/P)	Т	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			





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