



THE DATASHEET OF SBR230LSTR



SBR230LS SCHOTTKY RECTIFIER

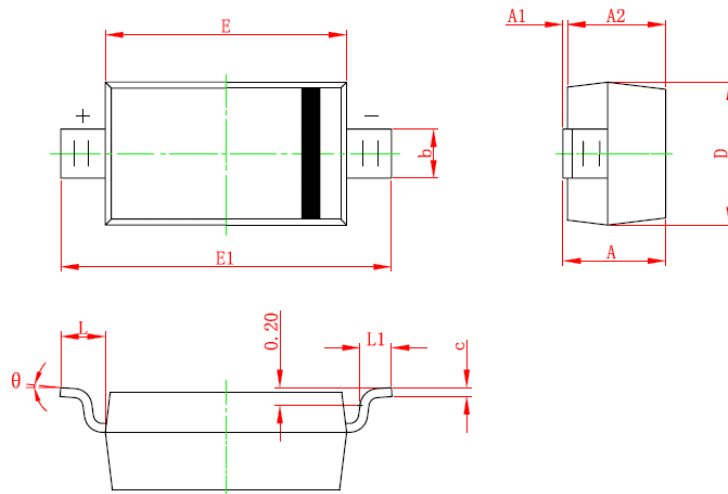
Applications:

- Switching power supply
- Converters
- Free-Wheeling diodes
- Reverse battery protection
- Center tap configuration

Features:

- 125 °C TJ operation
- Low forward voltage drop
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Mechanical Dimensions (In mm/Inches)

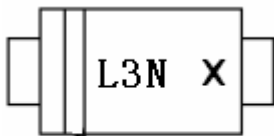


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°

SOD-123



Marking Diagram:



Where X is Date Code

L3N = Part Name

Cautions : Molding resin
Epoxy resin UL:94V-0

Ordering Information:

Device	Package	Shipping
SBR230LS	SOD-123 (Pb-Free)	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.



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

Characteristic	Symbol	Value	Unit
Peak Reverse Voltage	V_R	30	V
Average Rectified Output Current	$I_{F(AV)}$	2	A
Forward Voltage @ $I_F = 1\text{A}, T_A = 25^\circ\text{C}$ @ $I_F = 2\text{A}, T_A = 25^\circ\text{C}$ @ $I_F = 1\text{A}, T_A = 100^\circ\text{C}$ @ $I_F = 2\text{A}, T_A = 100^\circ\text{C}$	V_{FM}	0.60 0.75 0.52 0.67	V
Peak Reverse Current At Rated DC Blocking Voltage @ $T_A = 25^\circ\text{C}$ @ $T_A = 100^\circ\text{C}$	I_{RM}	1.0 25	mA
Peak Repetitive Forward Current (at rated V_R , square wave, 100kHz, $T_L=95^\circ\text{C}$)	I_{FRM}	4.0	A
Non-Repetitive Peak Surge Current (Surge Applied at Rated Load Conditions Halfwave, Single Phase, 60 Hz)	I_{FSM}	25	A
Maximum Junction Capacitance (Note 1)	C_j	150	pF
Operating Junction Temperature Range	T_J	-55 to +125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$
Voltage Rate of Change (rated V_R , $T_J=25^\circ\text{C}$)	$d v/dt$	10000	V/ μs
Approximate Weight	wt	0.028	g
Case Style	SOD-123		

Note 1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.

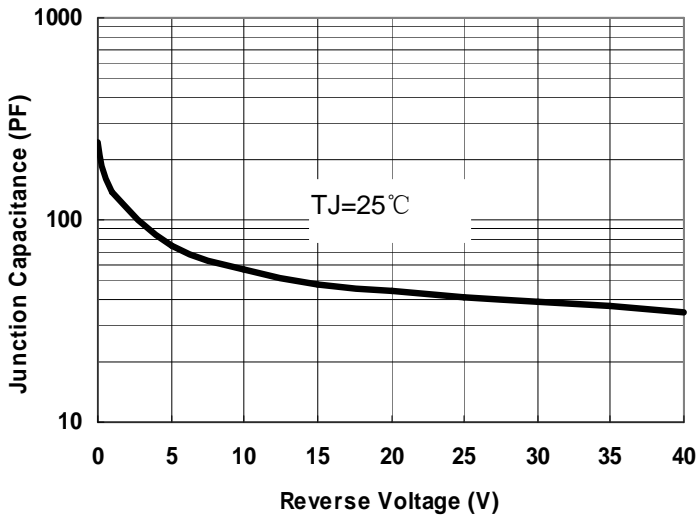


Fig.1-Typical Junction Capacitance

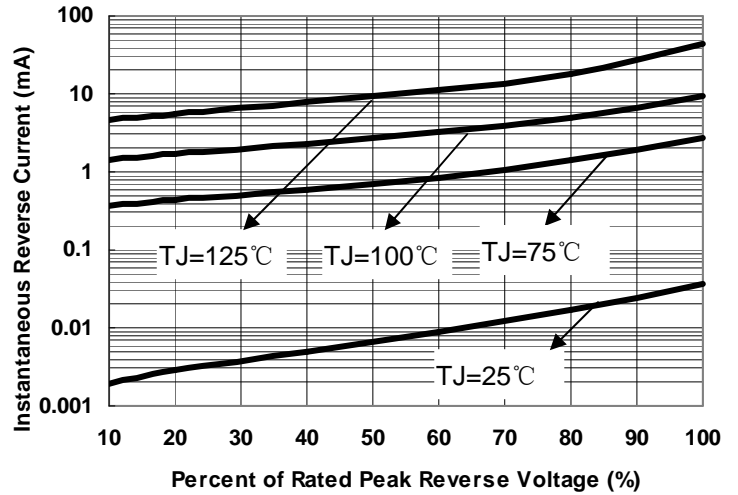


Fig.2-Typical Reverse Characteristics

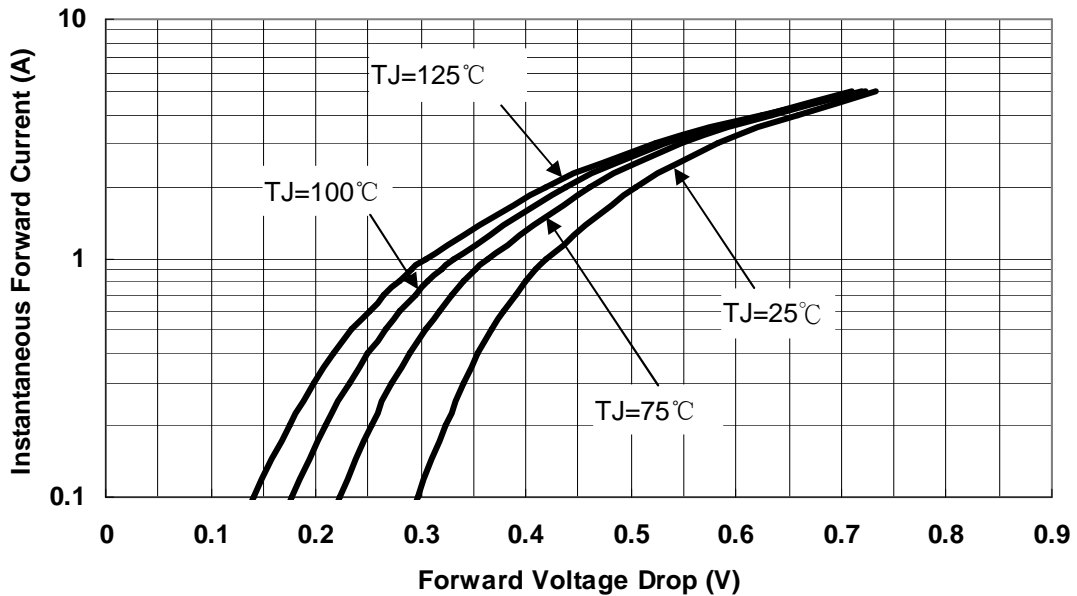


Fig.3-Typical Forward Voltage Drop Characteristics



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