

MBR230LS SURFACE MOUNT SCHOTTKY BARRIER DIODE



Features

- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard Ring Transient and ESD Protection
- Designed for Surface Mount Application
- Plastic Material —UL Recognition Flammability Classification 94V-0
- Green Products in Compliance with the ROHS Directive
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Mechanical Data

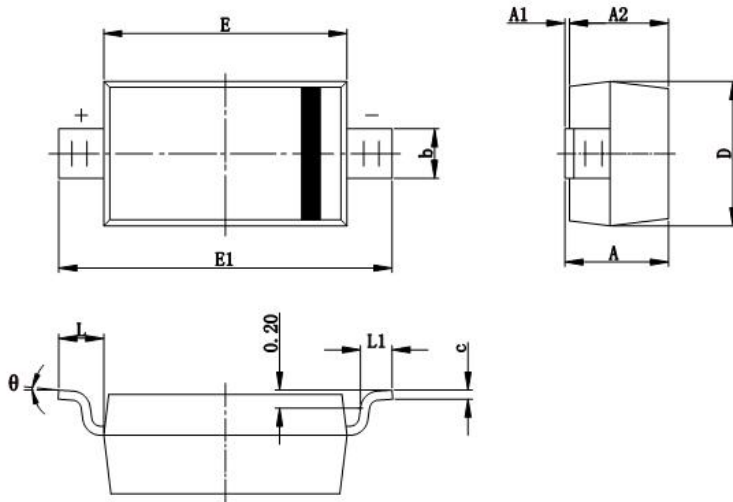
- Case: SOD-123, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band

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

Characteristic	Symbol	Value	Units
Peak Reverse Voltage	V_R	30	V
Average Rectified Output Current	$I_{F(AV)}$	2	A
Forward Voltage @ $I_F = 0.5\text{A}, T_A = 25^\circ\text{C}$ @ $I_F = 2.0\text{A}, T_A = 25^\circ\text{C}$	V_{FM}	0.3 0.5	V
Peak Reverse Current At Rated DC Blocking Voltage @ $T_A = 25^\circ\text{C}$	I_{RM}	1.0	mA
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	170	pF
Operating Junction Temperature Range	T_J	-55 to +100	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +100	$^\circ\text{C}$
Voltage Rate of Change (rated VR, $T_J=25^\circ\text{C}$)	dv/dt	10000	V/ μs
Approximate Weight	wt	0.028	g

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

Mechanical Dimensions SOD-123



SYMBOL	Millimeters		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°

Ordering Information

Device	Package	Shipping
MBR230LS	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.

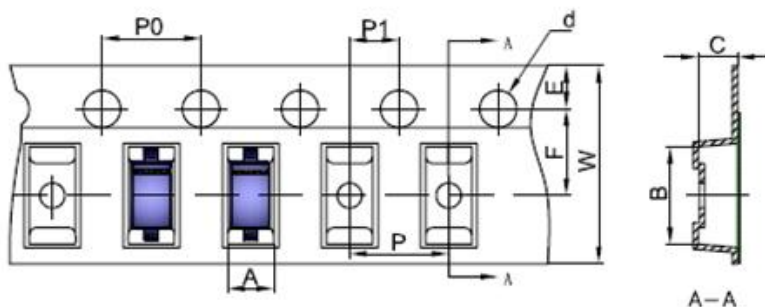
Marking Diagram



Where X is Date Code
B3N = Part Name

MBR230LS

Carrier Tape Specification SOD-123



SYMBOL	Millimeters	
	Min.	Max.
A	1.80	1.90
B	3.89	3.99
C	1.52	1.62
d	1.45	1.65
E	1.65	1.85
F	3.40	3.60
P	3.90	4.10
P0	3.90	4.10
P1	1.90	2.10
W	7.90	8.30



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