

## 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

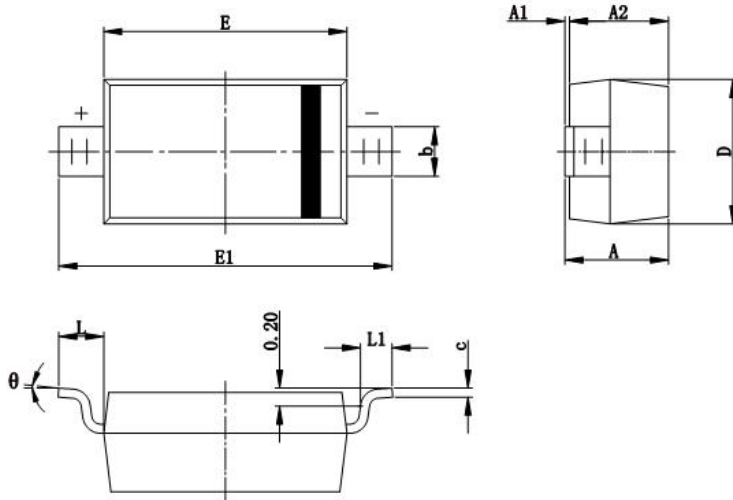
- Case: SOD-123, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band

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

Characteristic	Symbol	Value	Units
Peak Reverse Voltage	V <sub>R</sub>	30	V
Average Rectified Output Current	I <sub>F(AV)</sub>	2	A
Forward Voltage @I <sub>F</sub> = 0.5A, T <sub>A</sub> = 25°C @I <sub>F</sub> = 2.0A, T <sub>A</sub> = 25°C	V <sub>FM</sub>	0.3 0.5	V
Peak Reverse Current At Rated DC Blocking Voltage @T <sub>A</sub> = 25°C	I <sub>RM</sub>	1.0	mA
Non-Repetitive Peak Surge Current (Surge Applied at Rated Load Conditions Halfwave, Single Phase, 60 Hz)	I <sub>FSM</sub>	25	A
Maximum Junction Capacitance (Note 1)	C <sub>j</sub>	170	pF
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +100	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +100	°C
Voltage Rate of Change (rated VR, T <sub>J</sub> =25°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
$\theta$	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.

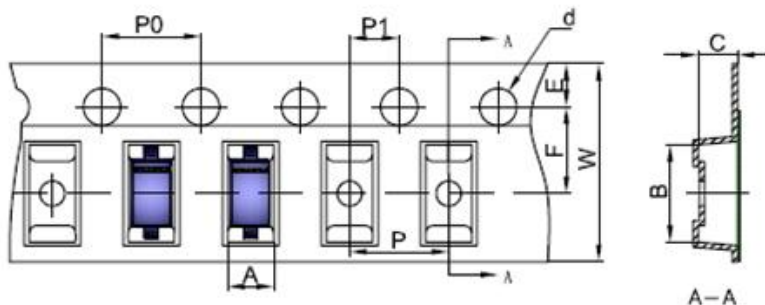
**Marking Diagram**



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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