

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Technical Data Data Sheet N1466, Rev.A





# 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-O
- 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	А
Forward Voltage $@I_F = 0.5A, T_A = 25^{\circ}C$ $@I_F = 2.0A, T_A = 25^{\circ}C$	$V_{FM}$	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	А
Maximum Junction Capacitance (Note 1)	C <sub>j</sub>	170	pF
Operating Junction Temperature Range	TJ	-55 to +100	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +100	°C
Voltage Rate of Change (rated VR, TJ=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.

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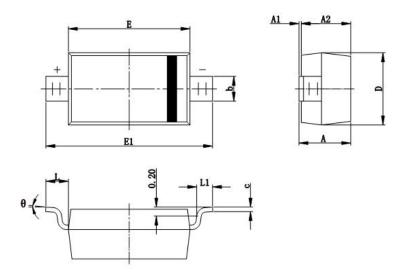


Technical Data Data Sheet N1466, Rev.A





## **Mechanical Dimensions SOD-123**



OVMDOL	Millimeters		Inches	
SYMBOL	MIN.	MAX.	MIN.	MAX.
Α	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
С	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
Е	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**

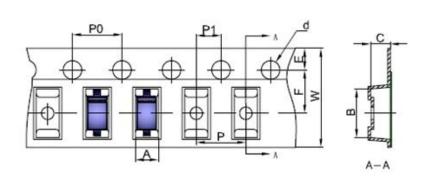


Where X is Date Code

B3N = Part Name

MBR230LS

# **Carrier Tape Specification SOD-123**



SYMBOL	Millimeters		
STIVIBUL	Min.	Max.	
Α	1.80	1.90	
В	3.89	3.99	
С	1.52	1.62	
d	1.45	1.65	
E	1.65	1.85	
F	3.40	3.60	
Р	3.90	4.10	
P0	3.90	4.10	
P1	1.90	2.10	
W	7.90	8.30	

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