

#### MBR260HW

Technical Data Data Sheet N1503, Rev.C



# MBR260HW SURFACE MOUNT SCHOTTKY BARRIER DIODE



### Features

- 125°C T<sub>J</sub> 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
- Terminals finish: 100% Pure Tin
- This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

### **Mechanical Data**

- Case: SOD-123, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.01 grams(approx)
- Marking code: L26

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

Characteristic	Symbol	Value	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	Vrrm Vrwm Vr	60	v
Average Rectified Forward Current (At Rated V <sub>R</sub> , T <sub>L</sub> = 55 $^{\circ}$ C)	lo	2	A
Forward Voltage $@I_F = 1A, T_A = 25^{\circ}C$ $@I_F = 2A, T_A = 25^{\circ}C$	V <sub>FM</sub>	0.52 0.66	V
Peak Reverse Current $@T_A = 25^{\circ}C$	I <sub>RM</sub>	50	μA
Non-Repetitive Peak Surge Current (Surge Applied at Rated Load Conditions Half-wave, Single Phase, 60 Hz)	IFSM	30	А
Maximum Junction Capacitance (Note 1)	Cj	100	pF
Operating Junction Temperature Range	TJ	125	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

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

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### **Circuit Diagram**



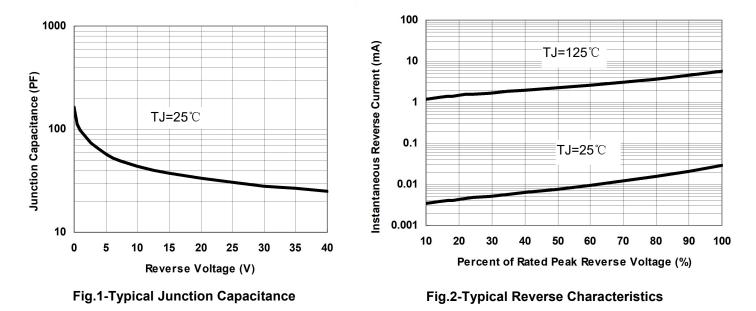


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### **Ratings and Characteristics Curves**



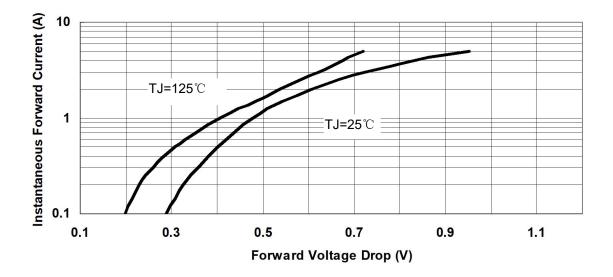


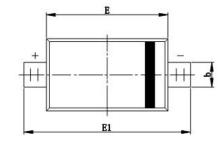
Fig.3-Typical Forward Voltage Drop Characteristics

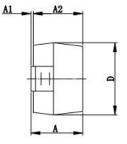
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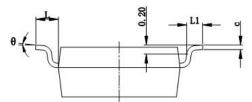


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### **Mechanical Dimensions SOD-123**







OVMDO	Millimeters		Inches		
SYMBOL	MIN.	MAX.	MIN.	MAX.	
А	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	
E	2.600	2.800	0.102	0.110	
E1	3.550	3.850	0.140	0.152	
L	0.500 REF.		0.020	0.020 REF.	
L1	0.250	0.450	0.010	0.018	
θ	0°	8°	0°	8°	

### **Marking Diagram**



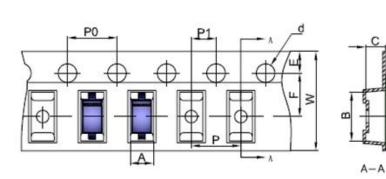
Where X is Date Code L26 =Marking code

## **Ordering Information**

Device	Package	Shipping
MBR260HW	SOD-123 (Pb-Free)	3000pcs / reel
MBR260HWTR	SOD-123 (Pb-Free)	3000pcs / reel
MBR260HWTR1	SOD-123 (Pb-Free)	10000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

### **Carrier Tape Specification SOD-123**



SYMBOL	Millimeters		
STMBOL	Min.	Max.	
A	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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