

Small Signal Schottky Diode

FEATURES

- ◆Epoxy meets UL-94 V-0 flammability rating and halogen free
- ◆Moisture Sensitivity Level 1
- ◆High temperature soldering guaranteed 260℃ /10seconds at terminals
- ◆Low Reverse Current
- ◆Low Stored Charge, Majority Carrier Conduction
- ◆Low Power Loss/High Efficiency

Pinning

1.Cathode	2.Anode
	
SOD-123	

Marking Code

MBR0530W	B3.
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Absolute Maximum Ratings (Ta=25℃ unless otherwise noted)

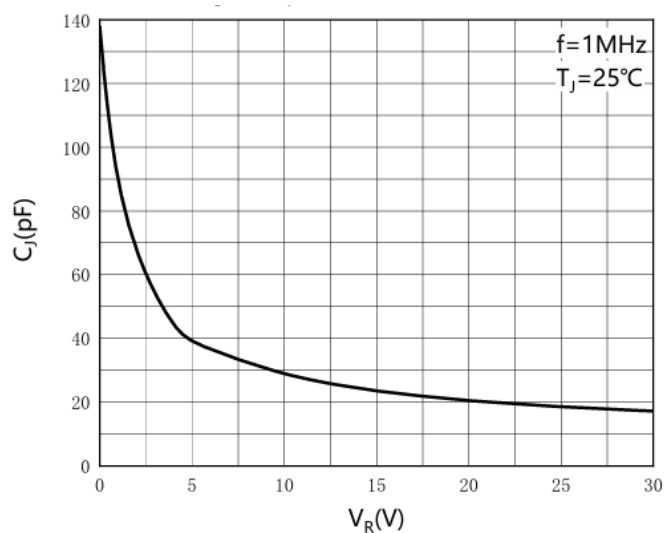
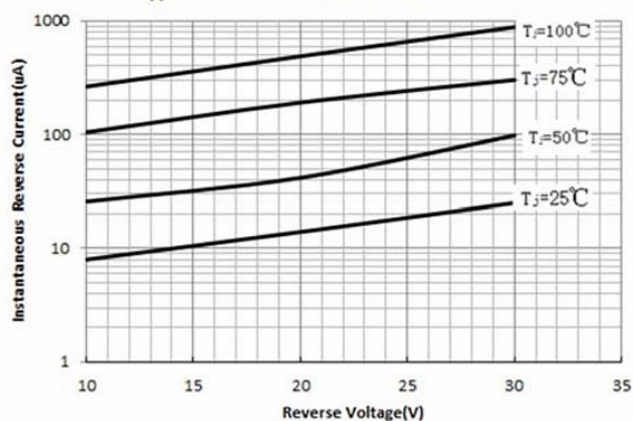
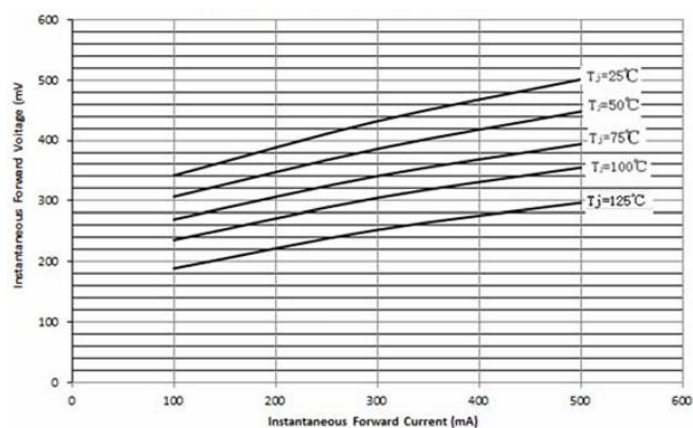
Parameter	Symbols	MBR0530W	Units
Repetitive peak reverse voltage	V_{RRM}	30	V
Average forward current	I_{FAV}	0.5	A
Peak forward surge current(tp=8.3ms)	I_{FSM}	5.5	A
Power dissipation	P_D	500	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	250	℃/W
Junction temperature	T_j	-55~125	℃
Storage temperature range	T_{stg}	-55~150	℃

Note: 1. Device mounted on an FR4 Printed-Circuit Board (PCB), single-side copper, tin-plated and standard footprint.

Electrical Characteristics (TJ=25℃ , unless otherwise noted)

Parameter	Test Conditions	Symbols	Min	Type	Max	Units
Forward Voltage	$I_F=0.1A$	V_{F1}	-	0.34	0.4	V
	$I_F=0.5A$	V_{F2}	-	0.5	0.55	
Reverse Current	$V_R=30V$	I_R	-	-	100	μA
Breakdown Voltage	$I_R=100\mu A$	V_R	30	-	-	V
Diode capacitance	$V_R=4V, f=1MHz$	C_D	-	-	50	pF

Ratings And Characteristic Curves



Ordering information

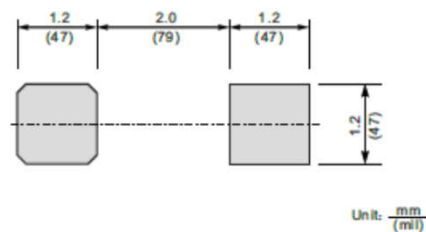
Package	Packing Description	Packing Quantity
SOD-123	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

Package Dimensions

SOD-123

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.3	35	51
C	0.09	0.22	3.5	8.7
D	1.5	1.8	59	71
E	2.5	2.8	98	110
E1	3.6	3.9	142	154
b	0.5	0.7	20	28
L1	0.25	0.45	10	18
A1	-	0.2	-	8
∠	9°			

The recommended mounting pad size



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