

Silicon Epitaxial Planar Switching Diode

FEATURES

- ◆Case:SOD-123
- ◆Epoxy meets UL-94 V-0 flammability rating and halogen free
- ◆Moisture Sensitivity Level 1
- ◆High temperature soldering guaranteed 260°C/10seconds at terminals

APPLICATION

- ◆Extreme fast switches
- ◆Automotive

Pinning

1.Cathode	2.Anode
 SOD-123	

Marking Code

1N4448W	T5
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Absolute Maximum Ratings (Ta=25°C unless otherwise noted)

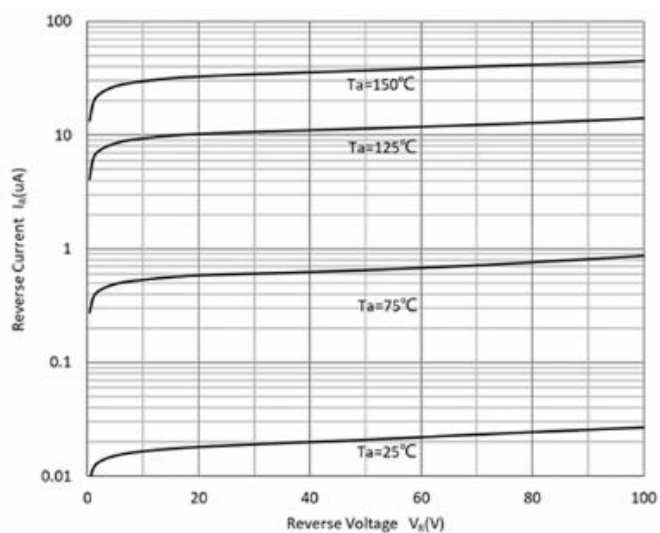
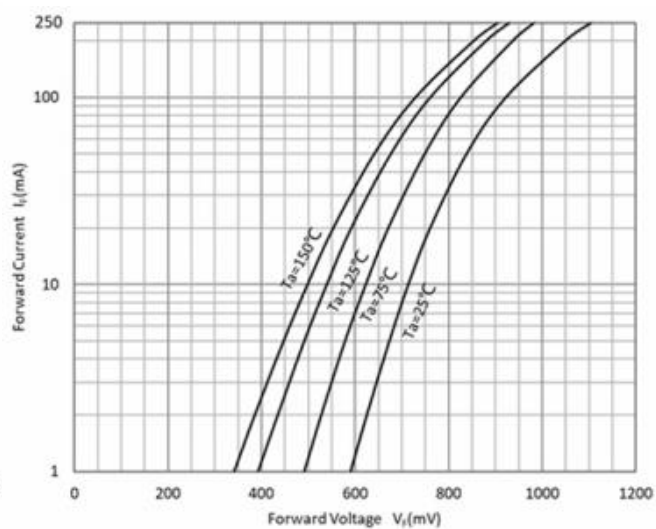
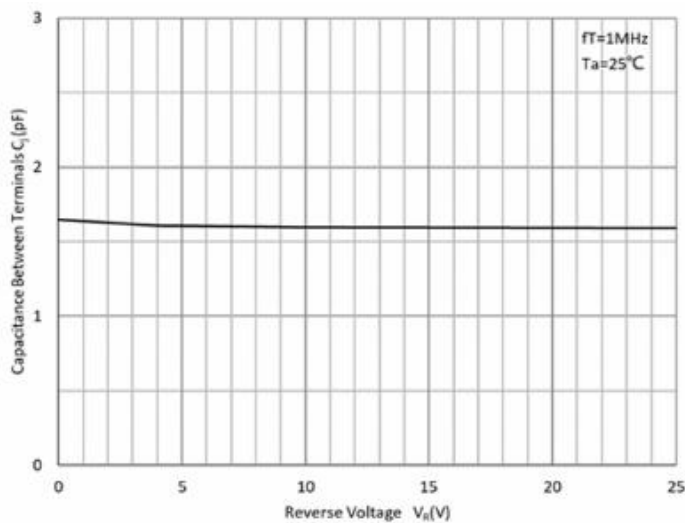
Parameter	Symbols	Value	Units
Repetitive peak reverse voltage	V_{RRM}	100	V
Average forward current	$I_{F(AV)}$	200	mA
Peak forward surge current(tp=1us)	I_{FM}	2	A
Power dissipation	P_D	500	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	250	°C/W
Junction temperature	T_J	-55~150	°C
Storage temperature range	T_{STG}	-55~150	°C

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

Electrical Characteristics (T_J=25°C , unless otherwise noted)

Parameter	Test Conditions	Symbols	Min	Type	Max	Units
Forward Voltage	$I_F=5mA$	V_{F1}			0.72	V
	$I_F=10mA$	V_{F2}		0.72	0.855	
	$I_F=100mA$	V_{F3}		0.93	1.00	
	$I_F=150mA$	V_{F4}			1.25	
Reverse Current	$V_R=20V$	I_{R1}			0.025	μA
	$V_R=75V$	I_{R2}			2.5	
Breakdown Voltage	$I_R=100\mu A$	V_{R1}	100			V
	$I_R=5\mu A$	V_{R2}	75			
Diode Capacitance	$V_R=V_F=0V, f=1MHz$	C_j			4	pF
Reverse Recovery Time	$I_F=10mA, I_{rr}=0.1I_R, R_L=100\Omega$	t_{rr}			4	nS

Ratings And Characteristic Curves



Ordering information

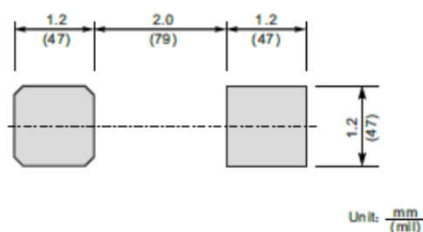
Package	Packing Description	Packing Quantity
SOD-123	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

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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