

GSDSBAT54W

Schottky Barrier Diode

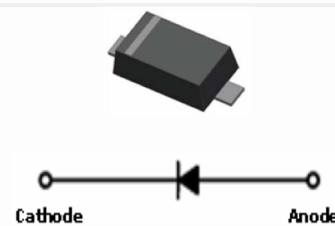
Product Description

Schottky Barrier Diode 400mW / 30V

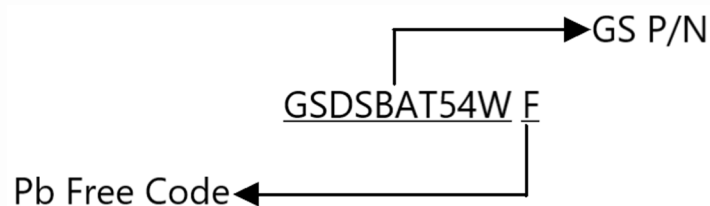
Features

- Low Forward Voltage Drop
- Flat Lead SOD-123 Small Outline Plastic Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicate Cathode

Marking Information

Part Number	Package	Part Marking	Equivalent Circuit diagram
GSDSBAT54WF	SOD-123	C3	

Ordering Information



Part Number	Package	Quantity
GSDSBAT54WF	SOD-123	3000 PCS

Absolute Maximum Ratings

($T_A=25^\circ\text{C}$ Unless otherwise noted)

Symbol	Parameter	Value	Unit
P_D	Power Dissipation	400	mW
V_{RRM}	Repetitive Peak Reverse Voltage	30	V
V_R	Maximum DC Blocking Voltage	30	V
T_J	Operating Junction Temperature	+125	$^\circ\text{C}$
T_{STG}	Storage Temperature Range	-65 to +125	$^\circ\text{C}$
$I_{F(AV)}$	Average Forward Rectified Current	200	mA
I_{FSM}	Forward current surge peak	4	A

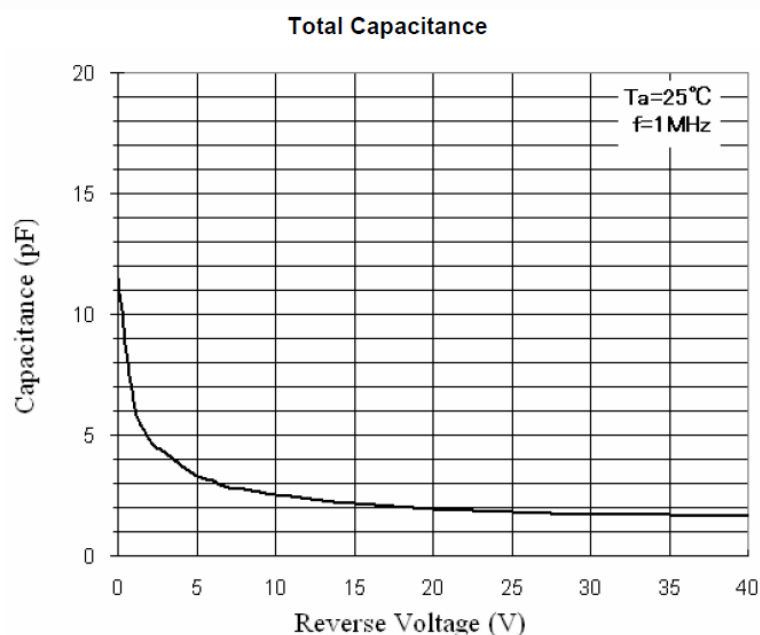
These ratings are limiting values above which the serviceability of the diode may be impaired.

Electrical Characteristics

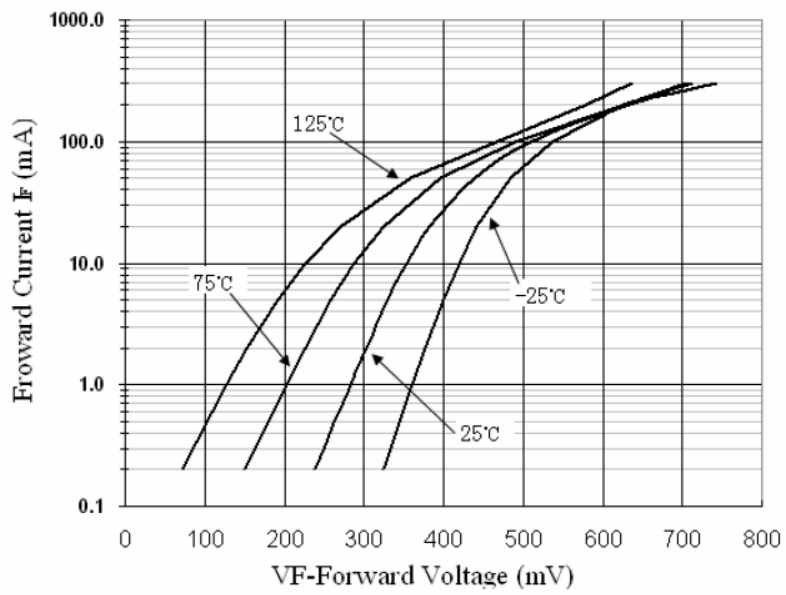
($T_A=25^\circ\text{C}$ Unless otherwise noted)

Symbol	Parameter	Test Condition	Min	Max	Unit
B_V	Breakdown Voltage	$I_R = 10\mu\text{A}$	30	-	V
I_R	Reverse Current	$V_R = 25\text{V}$	-	2	μA
V_F	Forward Voltage	$I_F = 0.1\text{mA}$	-	0.24	V
		$I_F = 1\text{mA}$	-	0.32	
		$I_F = 10\text{mA}$	-	0.40	
		$I_F = 30\text{mA}$	-	0.50	
		$I_F = 100\text{mA}$	-	0.80	
T_{RR}	Reverse Recovery Time	$I_F = I_R = 10\text{mA}$ $R_L = 100\Omega$ $I_{RR} = 1\text{mA}$	5		nS
C	Capacitance	$V_R = 1\text{V}, f = 1\text{MHz}$	10		pF

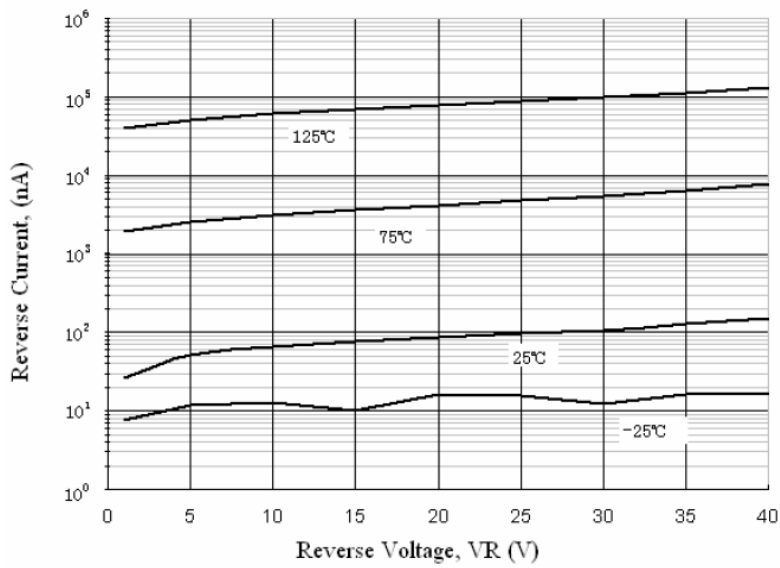
Typical Characteristics



Forward Voltage vs Ambient Temperature

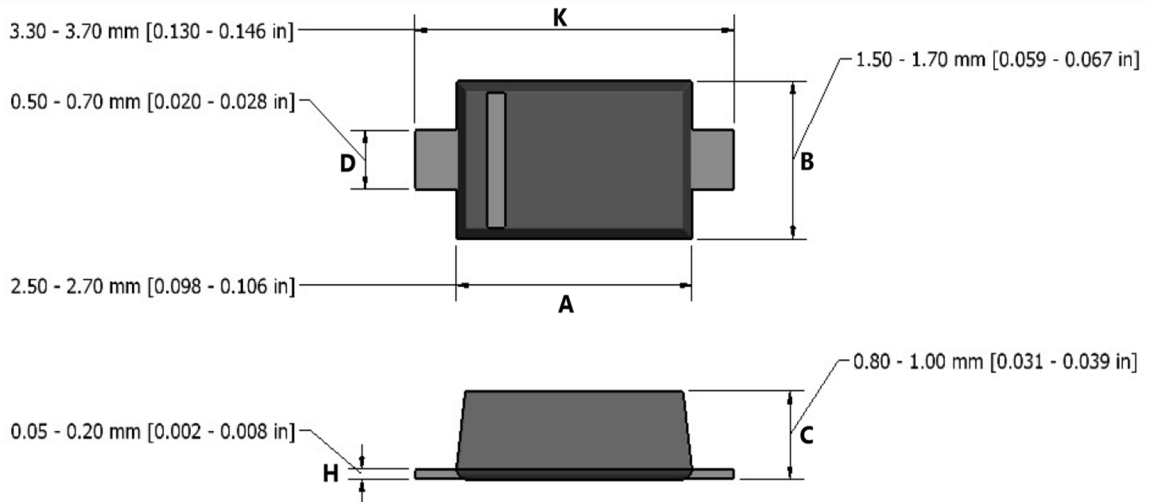


Reverse Current vs Reverse Voltage



Package Dimension

SOD-123



Note: The above package outline is similar to JEITA SC-90.





Dimensions				
Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	2.5	2.7	0.098	0.106
B	1.5	1.7	0.059	0.067
C	0.8	1	0.031	0.039
D	0.5	0.7	0.02	0.028
H	0.05	0.2	0.002	0.008
K	3.3	3.7	0.13	0.146

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