GSDSBAT42/43W

Fast Switching Schottky Barrier Diodes

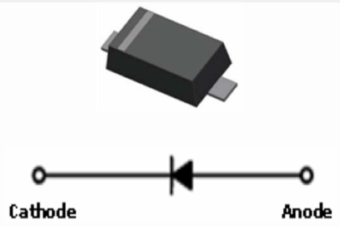
Product Description

Fast Switching Schottky Barrier Diodes
400mW / 30V

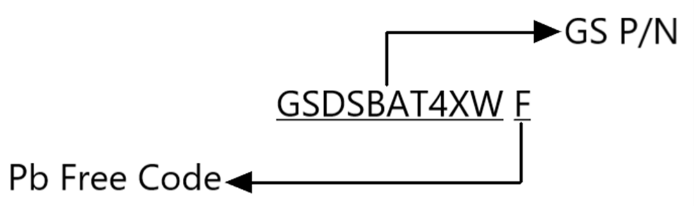
Features

- 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
GSDSBAT42WF	SOD-123	C1	
GSDSBAT43WF	SOD-123	C2	

Ordering Information



Part Number	Package	Quantity
GSDSBAT42WF	SOD-123	3000 PCS
GSDSBAT43WF	SOD-123	

Absolute Maximum Ratings

(T_A=25°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	°C
T_{STG}	Storage Temperature Range	-65 to +125	°C
$I_{F(AV)}$	Average Forward Rectified Current	200	mA
I_{FSM}	Forward current surge peak	4	A

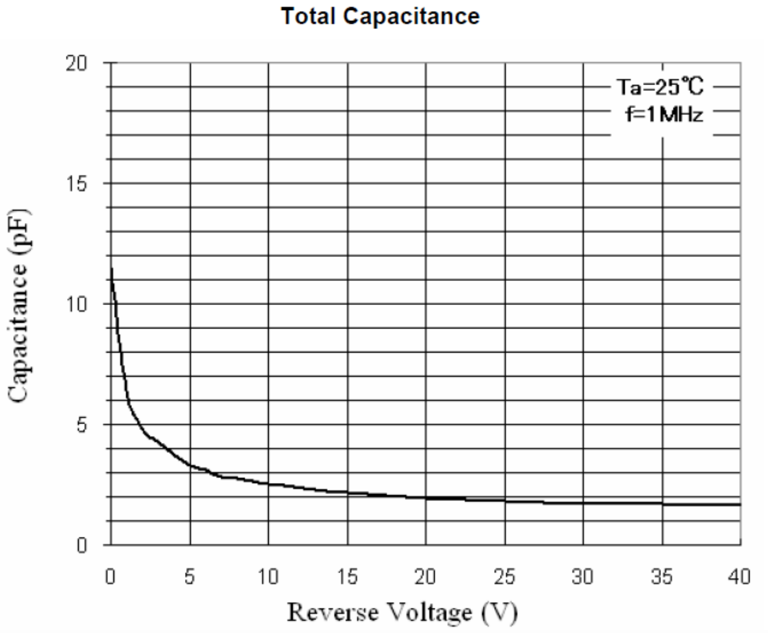
These ratings are limiting values above which the serviceability of the diode may be impaired.

Electrical Characteristics

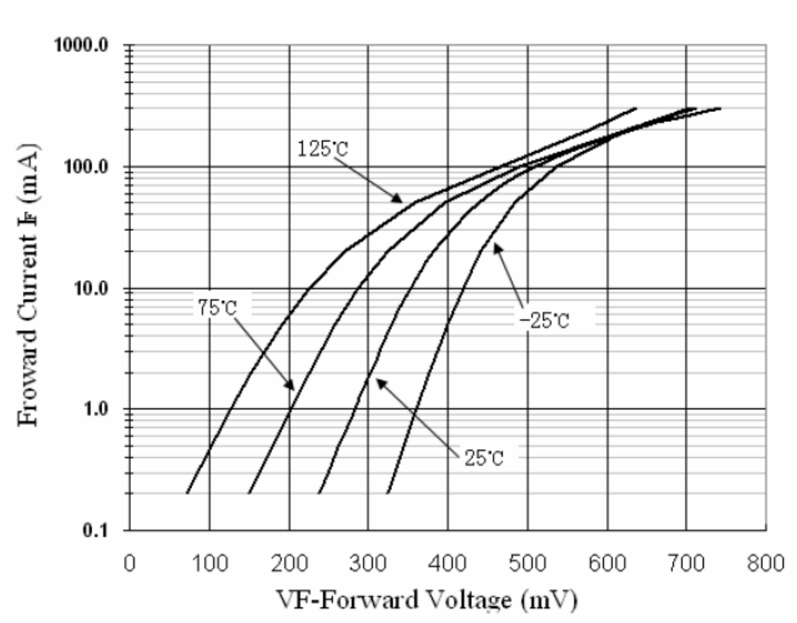
(T_A=25°C Unless otherwise noted)

Symbol	Parameter	Test Condition	Min	Max	Unit
B_V	Breakdown Voltage	I_R =100μA	30	-	V
I_R	Reverse Current	V_R=25V	-	500	nA
V_F	Forward Voltage GSDSBAT42W	I_F =10mA	-	0.40	V
		I_F =50mA	-	0.65	
	GSDSBAT43W	I_F =2mA	0.26	0.33	
		I_F =15mA	-	0.45	
	GSDSBAT42W, GSDSBAT43W	I_F =200mA	-	1.0	
T_{RR}	Reverse Recovery Time	I_F = I_R =10mA RL=100Ω I_{RR} =1mA	5(Typical)		nS
C	Capacitance	V_R =1V, f=1MHZ	7(Typical)		pF

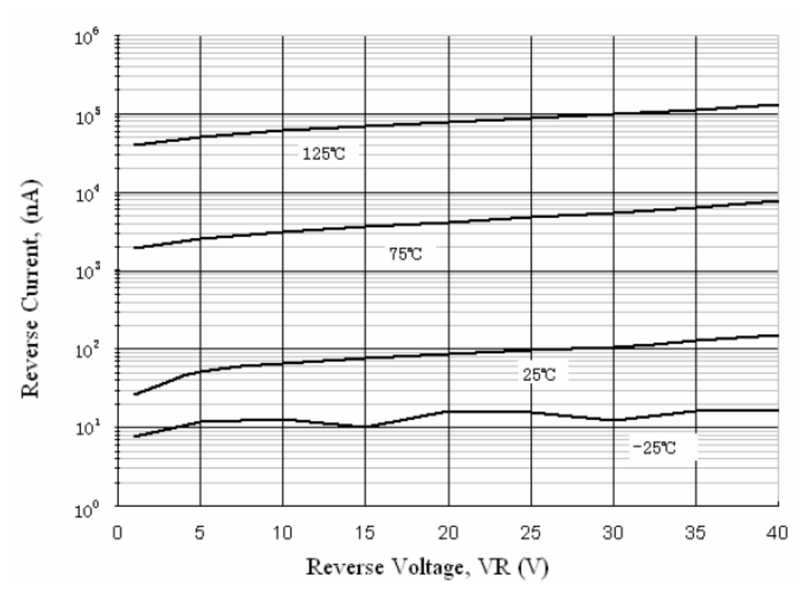
Typical Characteristics



Forward Voltage vs Ambient Temperature

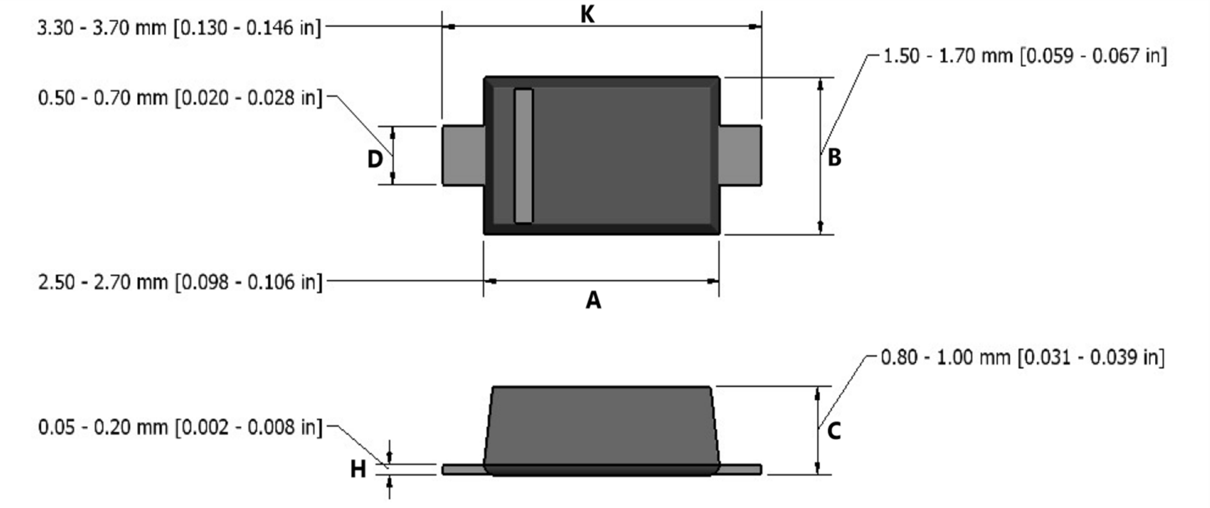


Reverse Current vs Reverse Voltage



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

NOTICE

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