

GSDSBAT54T/54ST

Schottky Barrier Diodes

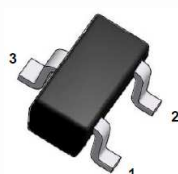
Product Description

Schottky Diodes 150mW / 30V

Features

- Low Forward Voltage Drop
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish

Packages

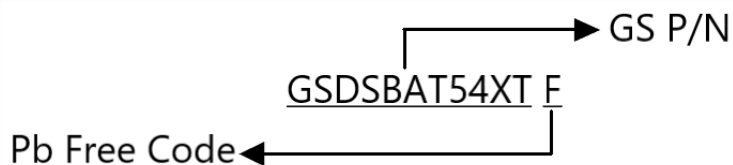


SOT-523

Marking Information

P/N	Package	Marking	Equivalent Circuit Diagram
GSDSBAT54TF	SOT-523	L1	
GSDSBAT54STF		L4	

Ordering Information



Part Number	Package	Quantity
GSDSBAT54TF	SOT-523	3000 PCS
GSDSBAT54STF		

GSDSBAT54T/54ST

Absolute Maximum Ratings

($T_A=25^{\circ}\text{C}$ Unless Otherwise specified)

Symbol	Conditions	Value	Unit
V_R	Reverse Voltage	30	V
I_{FO}	Average Rectified Output Current	200	mA
P_D	Power Dissipation	150	mW
T_J	Junction Temperature Range	+125	$^{\circ}\text{C}$
T_{STG}	Storage Temperature Range	-55 to +125	$^{\circ}\text{C}$

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

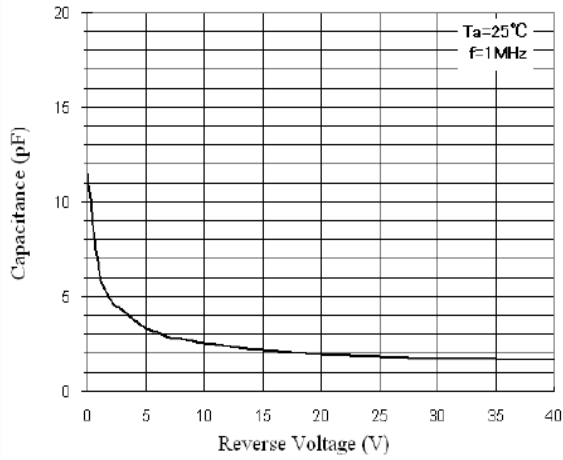
Electrical Characteristics

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

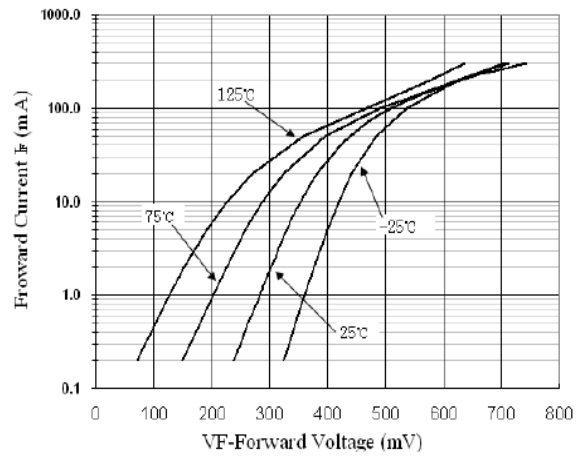
Symbol	Conditions	Min	Max	Unit
$V_{(BR)}$	Reverse Breakdown Voltage $I_R=100\mu\text{A}$	30	-	V
V_F	Forward Voltage $I_F=0.1\text{mA}$ $I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=30\text{mA}$ $I_F=100\text{mA}$	-	0.24 0.32 0.40 0.50 1	V
I_R	Reverse Leakage Current $V_R=25\text{V}$	-	2	μA
C_T	Total Capacitance $V_R=1\text{V}$, $f=1.0\text{MHz}$	-	10	pF
T_{rr}	Reverse Recovery Time $I_F=I_R=10\text{mA}$, $R_L=100\Omega$, $I_{RR}=0.1 \times I_R$	-	5.0	nS

Typical Characteristics

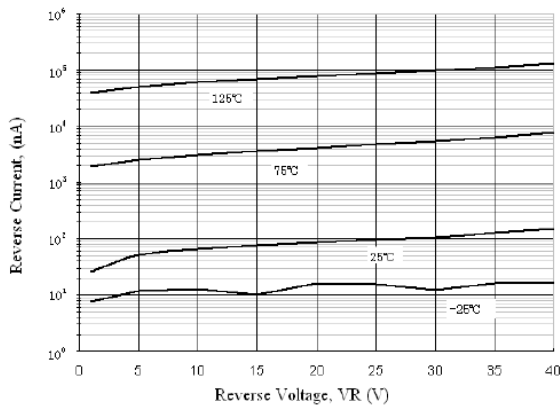
Total Capacitance



Forward Voltage vs Ambient Temperature

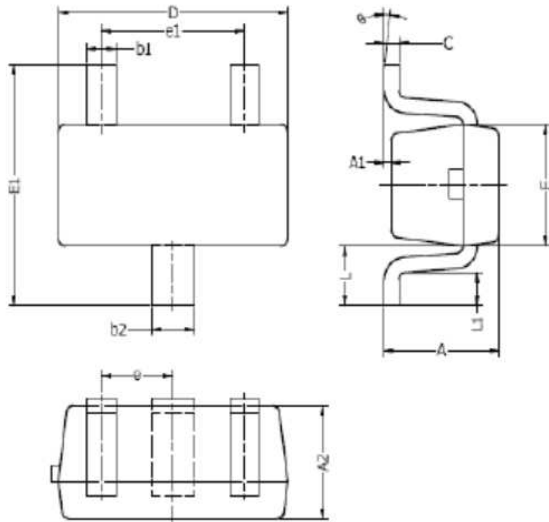


Reverse Current vs Reverse Voltage

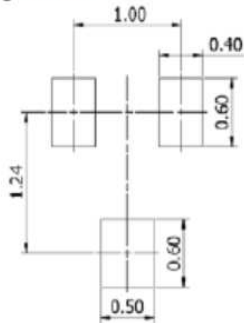


Package Dimension

SOT-523



Typical Soldering Pattern:



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.70	0.90	0.028	0.035
A1	0.00	0.10	0.000	0.004
A2	0.70	0.80	0.028	0.031
b1	0.15	0.25	0.006	0.010
b2	0.25	0.35	0.010	0.014
c	0.10	0.20	0.004	0.008
D	1.50	1.70	0.059	0.067
E	0.70	0.90	0.028	0.035
E1	1.45	1.75	0.057	0.069
e	0.50 TYP.		0.020 TYP.	
e1	0.90	1.10	0.035	0.043
L	0.40 REF.		0.016 REF.	
L1	0.10	0.30	0.004	0.012
theta	0°	8°	0°	8°





NOTES:



1. Above package outline conforms to JEITA EAIJ ED-7500A SC-75A.
2. Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.

NOTICE

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