

GSDSBAT54□F Series

Schottky Barrier Diode

Product Description

Reverse Voltage 30V
Forward Current 0.2A

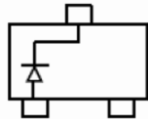
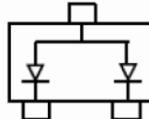
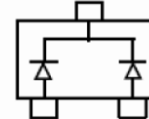
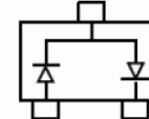
Features

- Low Forward Voltage Drop
- RoHS Compliant and Halogen Free

Mechanical Data

- Case: SOT-23 Package
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Color Band denotes Cathode End

Package and Pin Assignment

SOT-23			
GSDSBAT54F	GSDSBAT54AF	GSDSBAT54CF	GSDSBAT54SF
			

Ordering and Marking Information

Ordering Information			
Part Number	Package	Marking Code	Quantity / Reel
GSDSBAT54F	SOT-23	□□1	3,000 PCS
GSDSBAT54AF	SOT-23	□□2	3,000 PCS
GSDSBAT54CF	SOT-23	□□3	3,000 PCS
GSDSBAT54SF	SOT-23	□□4	3,000 PCS

GSDSBAT54 □ F		
- Product Code: GSDSBAT54	- Circuit Type Code: □ is blank, A, C and S	- Green Level: F for RoHS Compliant and Halogen Free

Marking Information	
□□□	- Product Code: L4 or KL
□	- Circuit Type Code: □ is 1, 2, 3 and 4.

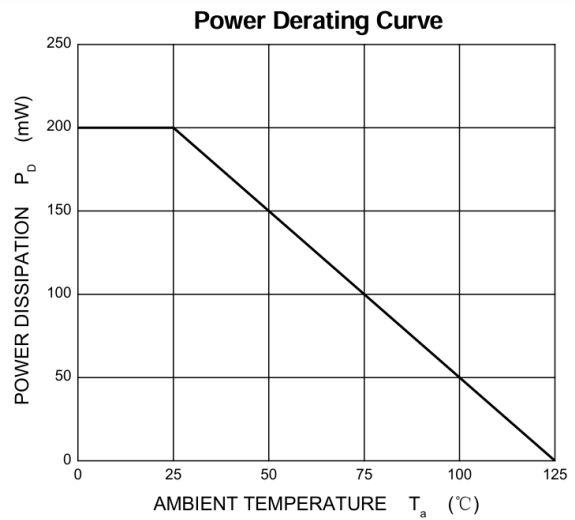
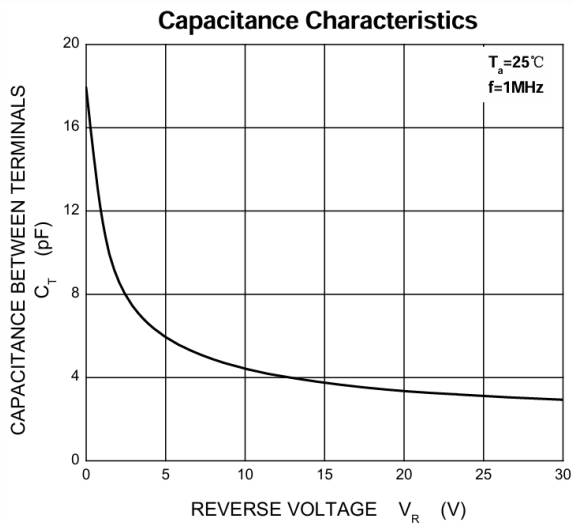
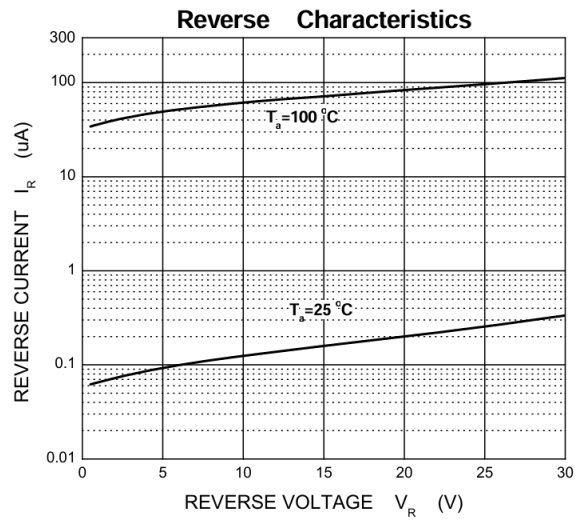
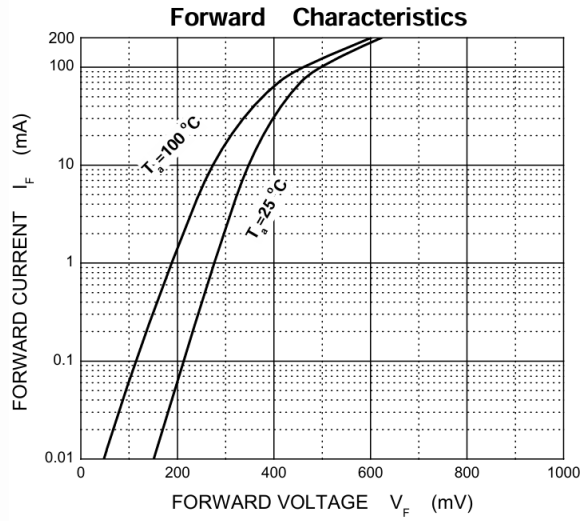
Absolute Maximum Ratings (T_A=25°C. Unless Otherwise Specified.)

Symbol	Test Conditions	Value	Unit
V _{RRM}	Repetitive Peak Reverse Voltage	30	V
I _F	Continuous Forward Current	200	mA
I _{FRM}	Repetitive Peak Forward Current (t ≤ 1s, Duty ≤ 0.5)	300	mA
I _{FSM}	Surge Forward Current (at t = 8.3ms)	600	mA
P _D	Power Dissipation	200	mW
R _{θJA}	Thermal Resistance Junction Ambient	500	°C/W
T _J	Operation Junction Temperature Range	-40 to +125	°C
T _{STG}	Storage Temperature Range	-55 to +150	°C

Electrical Characteristics (T_A=25°C. Unless Otherwise Specified.)

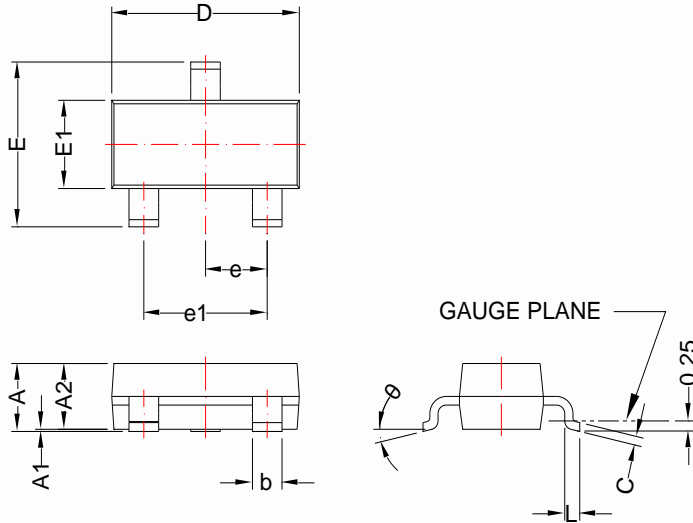
Symbol	Description	Test Conditions	Min.	Max.	Unit
V _{BR}	Reverse Breakdown Voltage	I _R =100μA	30	-	V
V _F	Forward Voltage	I _F =0.1mA	-	240	mV
		I _F =10mA	-	400	
		I _F =100mA	-	1000	
I _R	Reverse Current	V _R =25V	-	2	μA
C _d	Diode Capacitance	V _R = 1V, f=1MHz	-	10	pF
t _{rr}	Reverse Recovery time	I _F =I _R =10mA, I _{rr} =0.1×I _R , R _L =100Ω	-	5	nS

Typical Characteristics ($T_A=25^\circ\text{C}$. Unless Otherwise Specified.)

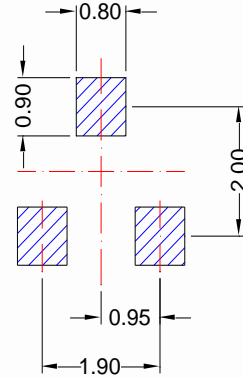


SOT-23

Package Dimension



Recommended Land Pattern



Dimensions





Symbol	Millimeters		Inches	
	MIN	MAX	MIN	MAX
A	0.75	1.17	0.030	0.046
A1	0.01	0.15	0.000	0.006
A2	0.70	1.02	0.028	0.040
b	0.30	0.50	0.012	0.020
c	0.08	0.20	0.003	0.008
D	2.80	3.04	0.110	0.120
E	2.10	2.64	0.083	0.104
E1	1.20	1.40	0.047	0.055
e	0.95 BSC		0.037 BSC	
e1	1.90 BSC		0.075 BSC	
L	0.3	0.6	0.012	0.024
θ	0°	8°	0°	8°



NOTE:
Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.

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