



YEA SHIN TECHNOLOGY CO. , LTD
150mW SOT-523 SURFACE MOUNT

BAT54T/ ST

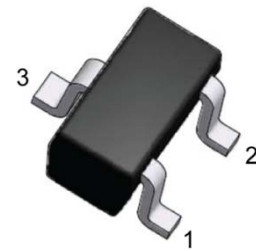


Plastic Package
Schottky Barrier Diode

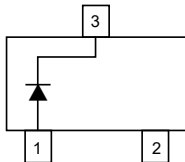
FEATURES

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

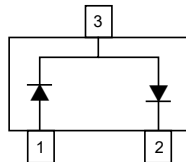
SOT-523



Electrical Symbol & Marking Codes:



BAT54T
Marking: L1



BAT54ST
Marking: L4

Maximum Ratings (TA=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
P _D	Power Dissipation	150	mW
T _{STG}	Storage Temperature Range	-55 to +125	°C
T _J	Operating Junction Temperature	125	°C
V _R	Reverse Voltage	30	V
I _O	Average Rectified Output Current	200	mA

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

Electrical Characteristics (TA=25°C unless otherwise noted)

Symbol	Parameter	Test Condition	Limits		Unit
			Min.	Max.	
V _(BR)	Reverse Breakdown Voltage	I _R =100μA	30	-	V
I _R	Reverse Leakage Current	V _R =25V	-	2	uA
V _F	Forward Voltage	I _F =0.1mA I _F =1mA I _F =10mA I _F =30mA I _F =100mA	-	0.24 0.32 0.4 0.5 1	V
C _T	Total Capacitance	V _R =1V, f=1MHz	-	10	pF
T _{rr}	Reverse Recovery Time	I _F =I _R =10mA I _{RR} =0.1xI _R , R _L =100Ω	-	5	nS

DEVICE CHARACTERISTICS

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FIG. 1-Typical Forward Characteristics

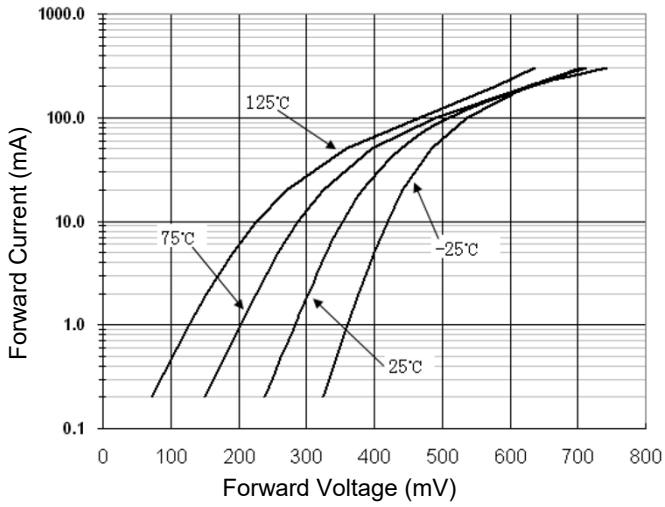


FIG. 2-Typical Reverse Characteristics

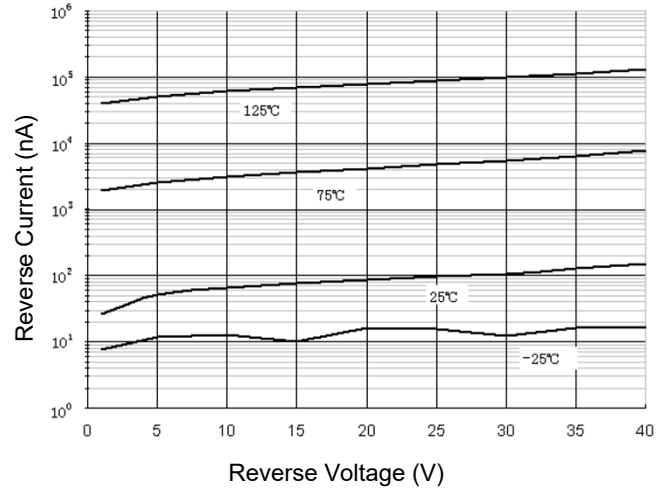
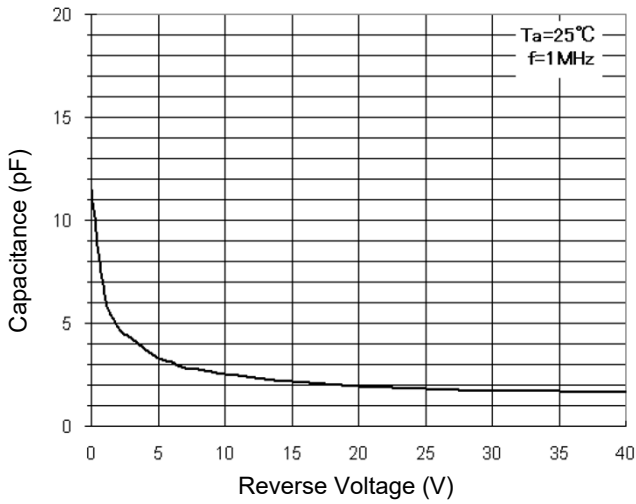


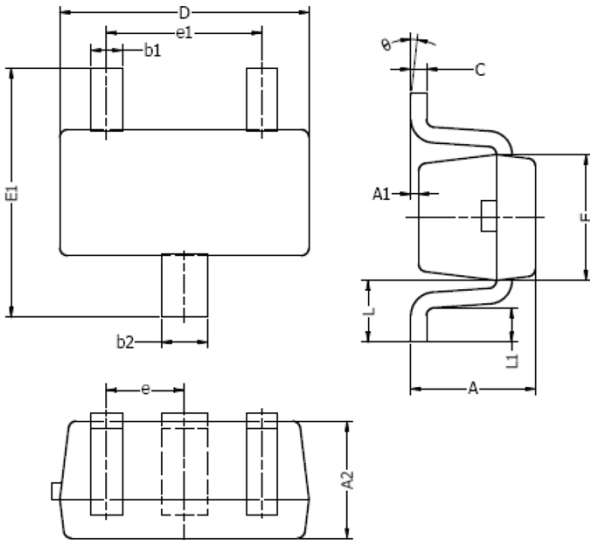
FIG. 3-Capacitance



PACKAGE OUTLINE AND DIMENSIONS

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SOT-523 Package Outline



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
θ	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.

Typical Soldering Pattern

