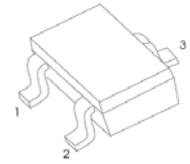
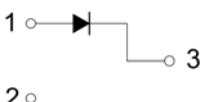
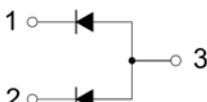
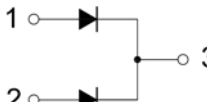
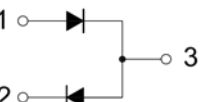


FEATURES

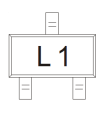
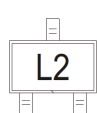


- Low Forward Voltage Drop
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection

SOT-523



BAT54T	BAT54AT	BAT54CT	BAT54ST
			

MARKING:

BAH) (H	BAH) (5 H	BAH) (7 H	BAH) (GH
			

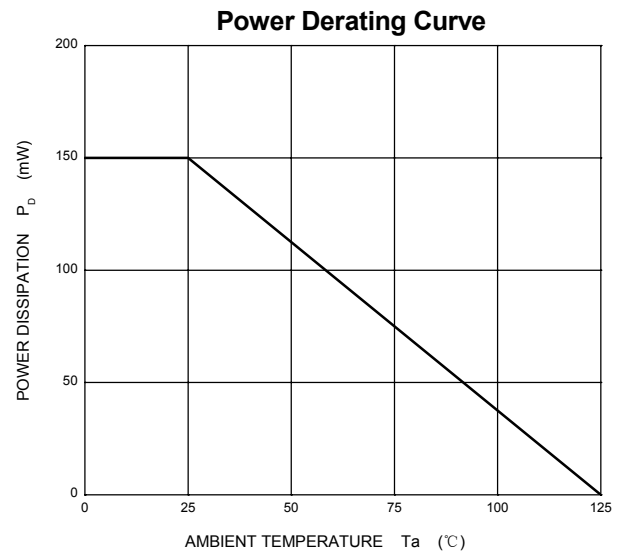
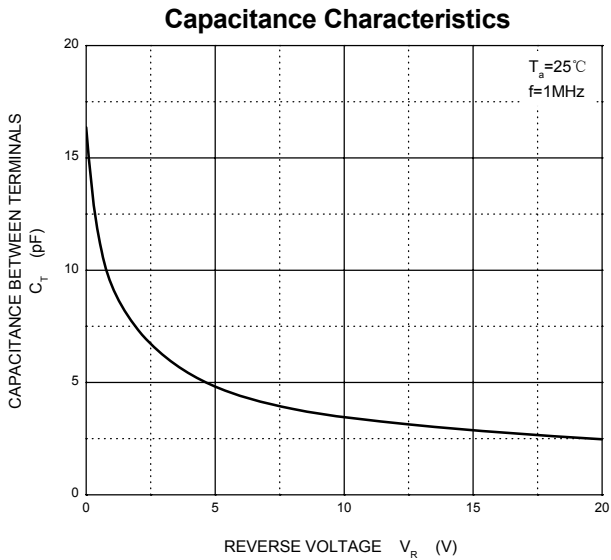
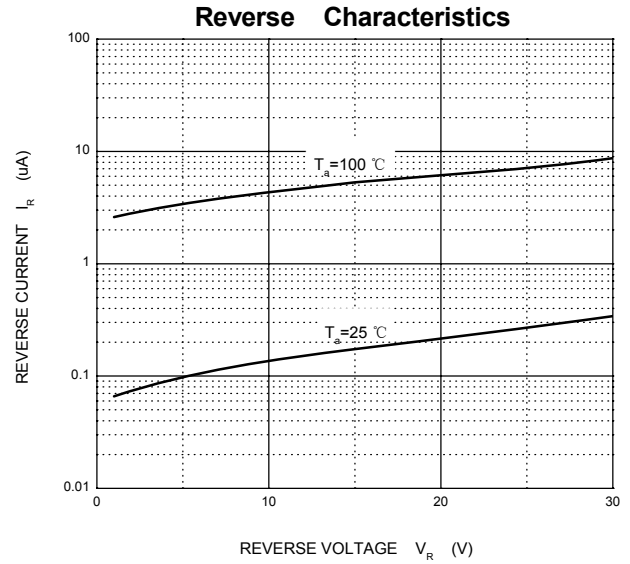
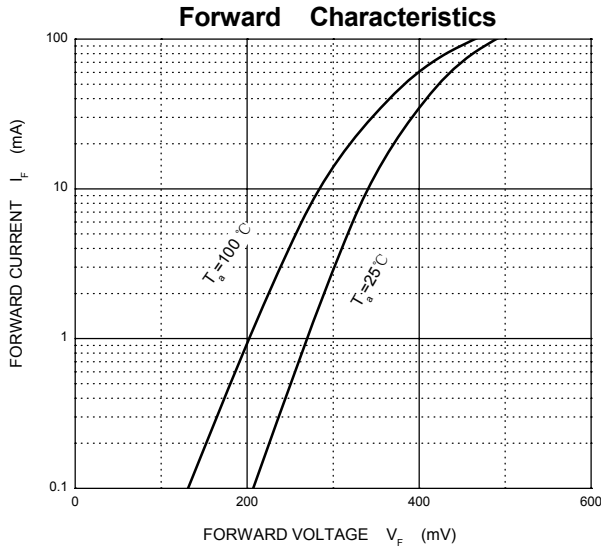
MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{RRM}	Peak Repetitive Reverse Voltage	30	V
V _{RWM}	Working Peak Reverse Voltage		
V _{R(RMS)}	RMS Reverse Voltage	21	V
I _o	Average Rectified Output Current	0.2	A
I _{FSM}	Non-repetitive Peak Forward Surge Current @ t=8.3ms	600	mA
I _{FRM}	Repetitive Peak Forward Surge Current @ t≤1s; δ ≤0.5	300	mA
P _D	Power Dissipation	150	mW
R _{θJA}	Thermal Resistance from Junction to Ambient	667	°C/W
T _j	Junction Temperature	125	°C
T _{stg}	Storage Temperature	-55~+150	°C

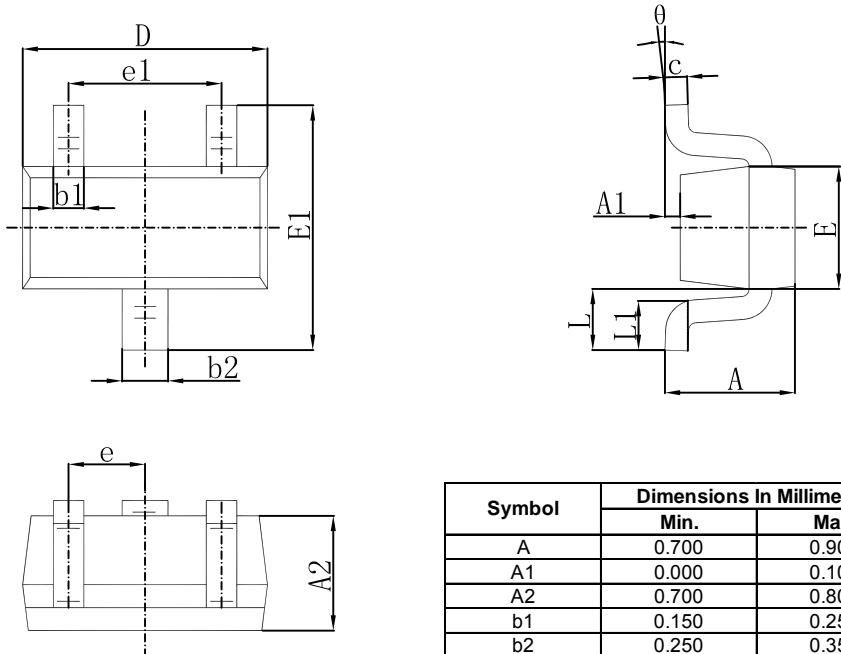
ELECTRICAL CHARACTERISTICS(T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	V _(BR)	I _R =100μA	30			V
Reverse current	I _R	V _R =25V			2	μA
Forward voltage	V _F	I _F =1mA			0.32	V
		I _F =10mA			0.4	
		I _F =30mA			0.5	
		I _F =100mA			1	
Total capacitance	C _{tot}	V _R =1V, f=1MHz			10	pF
Reverse recovery time	t _{rr}	I _F = I _R =10mA, I _{rr} =0.1×I _R , R _L =100Ω			5	ns

Typical Characteristics

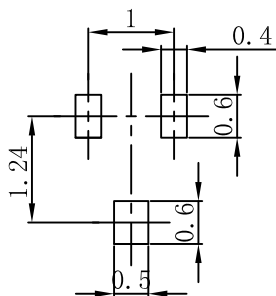


SOT-523 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.700	0.900	0.028	0.035
A1	0.000	0.100	0.000	0.004
A2	0.700	0.800	0.028	0.031
b1	0.150	0.250	0.006	0.010
b2	0.250	0.350	0.010	0.014
c	0.100	0.200	0.004	0.008
D	1.500	1.700	0.059	0.067
E	0.700	0.900	0.028	0.035
E1	1.450	1.750	0.057	0.069
e	0.500 TYP.		0.020 TYP.	
e1	0.900	1.100	0.035	0.043
L	0.400 REF.		0.016 REF.	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

SOT-523 Suggested Pad Layout



- Note:
1. Controlling dimension: in millimeters.
 2. General tolerance: $\pm 0.05\text{mm}$.
 3. The pad layout is for reference purposes only.