SOT-323 Plastic-Encapsulate Schottky Barrier Diodes

RoHS
COMPLIANT



SOT -323

Features

- High Current Capability
- Low Forward Voltage Drop
- Extremely Fast Switching Speed

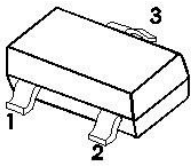
Marking:

BAT54WW：KL5
BAT54AW：KL6
BAT54CW：KL7
BAT54SW：KL8

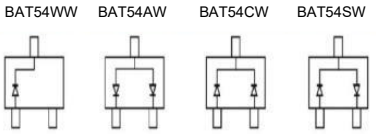
Applications

- SOT-323 Small Outline Plastic Package
- Epoxy UL: 94V-0
- Mounting Position: Any

Pin definition



Epuivalent circuit



Maximum Ratings & Electrical Characteristics (TA=25℃ unless otherwise noted)

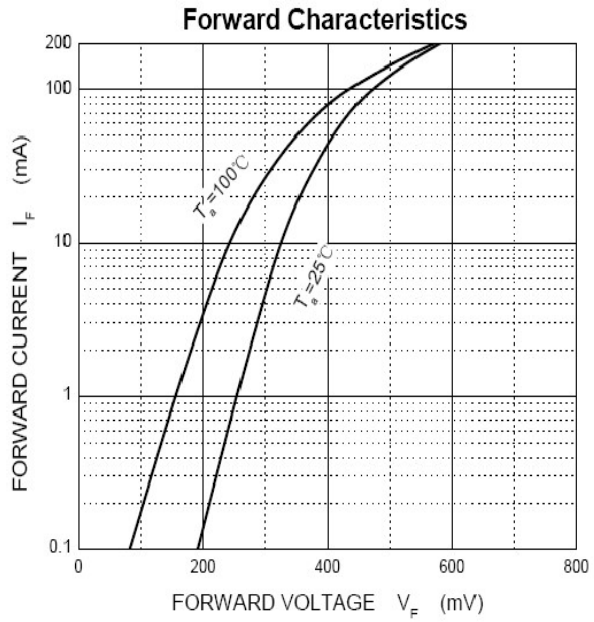
Parameter	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	30	V
Working Peak Reverse voltage	V_{RWM}	30	V
Maximum DC blocking voltage	V_{DC}	30	V
Non-repetitive Peak Forward Current	I_{FM}	200	mA
Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	600	mA
Typical thermal resistance	$R_{\theta JA}$	500	℃/W
Power Dissipation	P_D	200	mW
Junction Temperature	T_J	125	℃
Storage temperature range	T_{STG}	-50-+150	℃

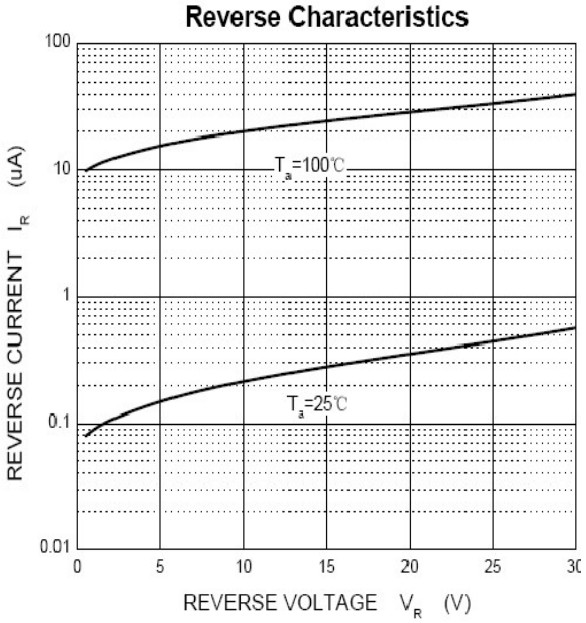
Electrical Specifications (TA=25℃ unless otherwise noted)

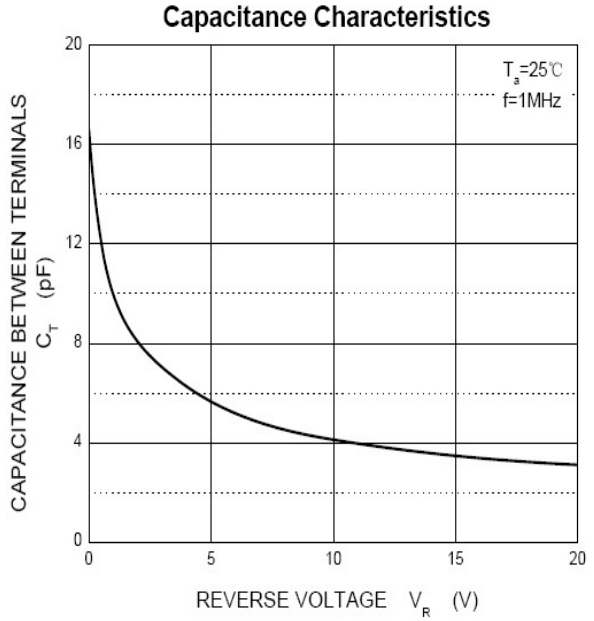
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Maximum reverse breakdown voltage	$V_{(BR)}$	I_R = 100uA	30			V
Forward Voltage	V_F	IF = 0.1mA			240	mV
		IF = 1.0mA			320	mV
		IF = 10mA			400	mV
		IF = 30mA			500	mV
Maximum reverse current	I_R	VR=25V			2.0	uA
Type junction capacitance	C_j	VR = 1.0V, f = 1MHz			10	pF
Reverse Recovery Time	T_{RR}	IF=IR=10mA Irr=0.1xIR，RL=100Ω			5	nS

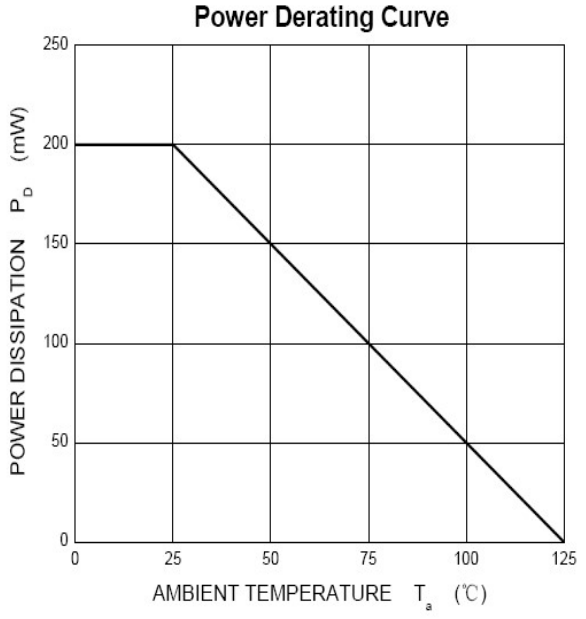
Ratings and Characteristics Curves

(TA = 25℃ unless otherwise noted)



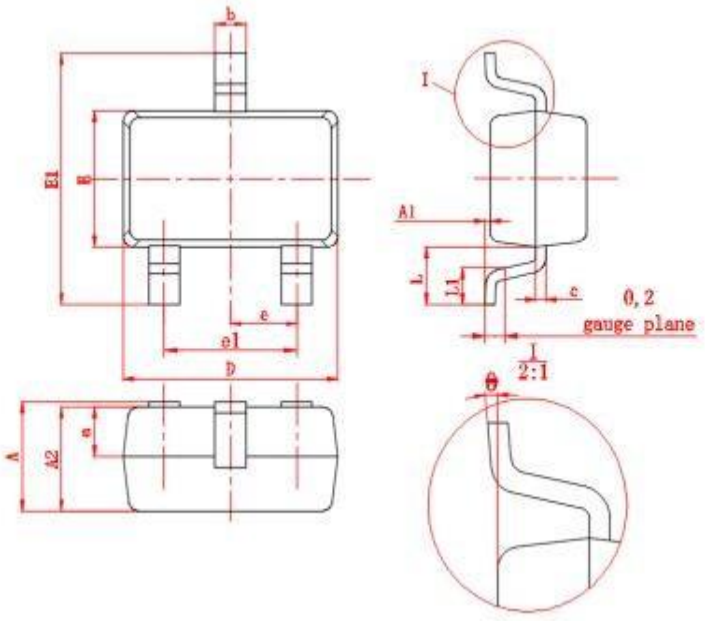






Package Outline Dimensions

millimeters



Symbol	Millimeters	
	min	max
A	0.9	1.1
A1	0	0.1
A2	0.9	1.0
a	(0.45)	
D	2.0	2.2
E	1.15	1.35
E1	2.15	2.45
e	(0.65)	
e1	1.2	1.4
b	0.25	0.35
c	0.08	0.15
L	(0.525)	
L1	0.26	0.46
θ	0°	8°

Revision History

Document Version	Date of release	Description of changes
Rev.A	2018.07.07	First issue
Rev.B	2026.07.13	Part name changed from BAT54W to BAT54WW.

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