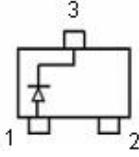
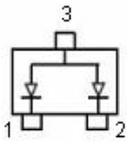
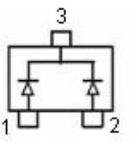
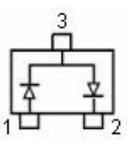


## BAT54 Series

### Description

Schottky (Schottky) diode is also known as Schottky barrier Rectifiers (SBR,) has been in the power supply industry for 25 years, it is a low-power, ultra-high speed semiconductor devices, widely used in switching power supplies, frequency converters, Driver circuit, such as high frequency, low voltage, high current rectifier diode, continuous current diode, protection diode, or microwave communication circuit as rectifier diode, small signal detector diode.

BAT54、BAT54A、BAT54C、BAT54S All have extremely fast motion speed

<b>SOT-23</b>				
<b>Pin</b>	<b>BAT54</b>	<b>BAT54A</b>	<b>BAT54C</b>	<b>BAT54S</b>
1	a	K1	a1	a1
2	空	K2	a2	K2
3	K1	a	K1、K2	K1、a2

### Features

- Compact package, easy to install
- High-efficiency overvoltage protection device
- Ultra-low forward pressure drop
- Ideal products for High Frequency Circuits
- Comply with relevant welding international standard MIL-STD-202

### Terminology

- $I(AV)$  ..... Average Forward Rectified Current
- $I_{RM}$  ..... Maximum Reverse Leakage Current
- $I_{RRM}$  ..... Repetitive Peak Reverse Current
- $I_{RSM}$  ..... Maximum Non-repetitive Reverse Peak Current
- $V_{FM}$  ..... Maximum Forward Voltage
- $V_{FR}$  ..... Forward Recovery Voltage
- $V_{RRM}$  ..... Maximum Repetitive Peak Reverse Voltage

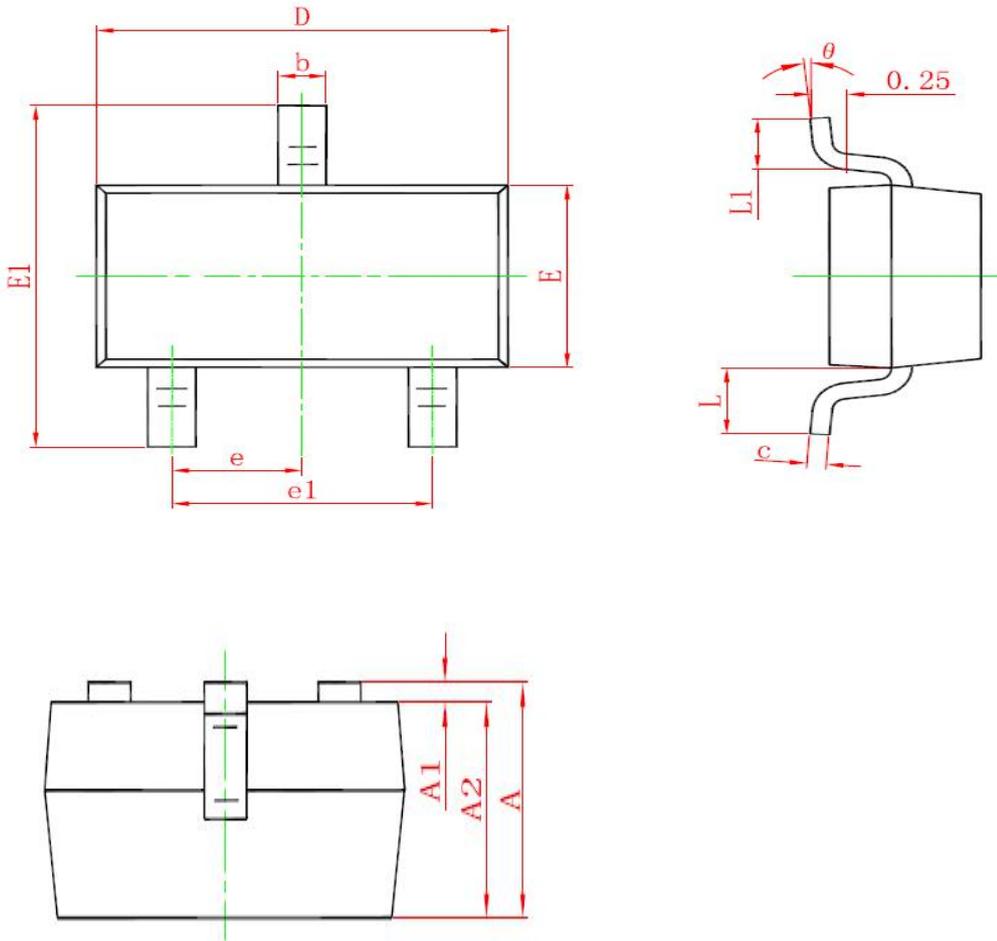
**Electrical Characteristics**

TA=25°C maximum rating

Parameter	Symbol	Limits	Unit
Peak Repetitive Peak reverse voltage	V <sub>RRM</sub>	30	V
Working Peak Reverse Voltage	V <sub>RWM</sub>		
DC Blocking Voltage	V <sub>R</sub>		
Forward Continuous Current	I <sub>FM</sub>	200	mA
Power Dissipation	P <sub>D</sub>	200	mW
Storage temperature	T <sub>STG</sub>	-55-150	°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	V <sub>(BR)R</sub>	30			V	I <sub>R</sub> =100μA
	V <sub>F1</sub>			0.24	V	I <sub>F</sub> =0.1mA
	V <sub>F2</sub>			0.32	V	I <sub>F</sub> =1mA
	V <sub>F3</sub>			0.40	V	I <sub>F</sub> =10mA
	V <sub>F4</sub>			0.50	V	I <sub>F</sub> =30mA
	V <sub>F5</sub>			1	V	I <sub>F</sub> =100mA
Reverse current	I <sub>R</sub>			2	μA	V <sub>R</sub> =25V
Diode Capacitance	C <sub>D</sub>			10	pF	V <sub>R</sub> =1V, f=1MHz
Reverse Recovery Time	t <sub>rr</sub>			5	nS	I <sub>F</sub> =I <sub>F</sub> =10mA <sub>R</sub> I <sub>rr</sub> =0.1I <sub>F</sub> , R =100Ω <sub>R L</sub>

SOT-23 Package Outline Dimensions @ Layout



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP.		0.037 TYP.	
e1	1.800	2.000	0.071	0.079
L	0.550 REF.		0.022 REF.	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°