

**SOT-23 Plastic-Encapsulate Diodes**
**BAT54/A/C/S**
**Schottky Barrier Diodes**
**FEATURES:**

- High Conductance
- Fast Switching Speed
- For General Purpose Switching Applications



BAT54	BAT54A	BAT54C	BAT54S
MARKING: KL1	MARKING:KL2	MARKING :KL3	MARKING:KL4

Solid dot = Green molding compound device, if none, the normal device.

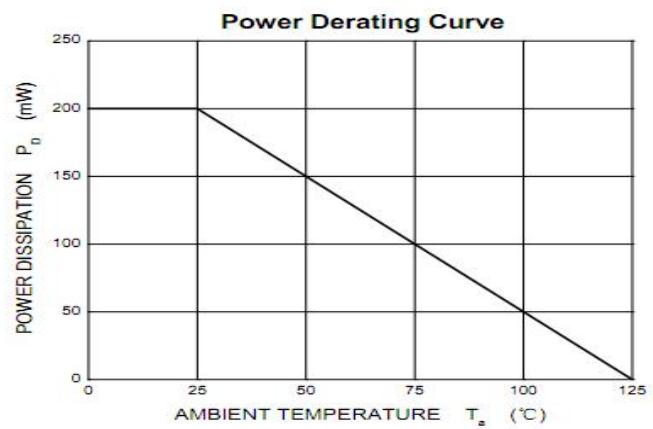
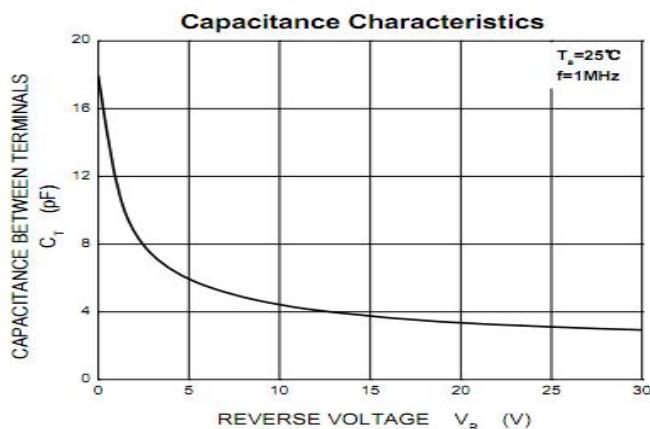
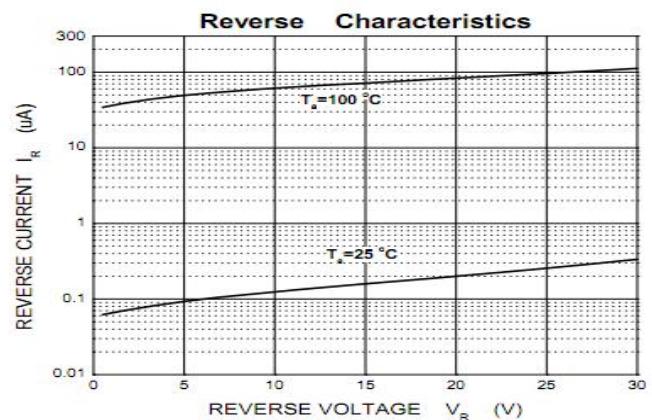
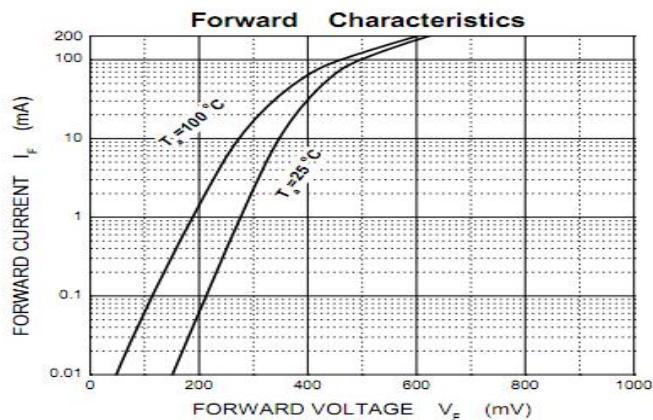
**Maximum ratings (@Ta=25°C)**

Parameter	Symbol	Limit	Unit
Peak Repetitive Reverse Voltage	VRRM	30	V
Working Peak Reverse Voltage	VRWM	30	V
DC Blocking Voltage	VR	30	V
Forward Continuous Current	IFM	200	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	IFSM	600	mA
Repetitive Peak Forward Current @ t≤1s,δ≤0.5	IFRM	300	mA
Power Dissipation	PD	200	mW
Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	500	°C/W
Junction Temperature	T <sub>J</sub>	125	°C
Storage Temperature Range	T <sub>STG</sub>	-55~+150	°C

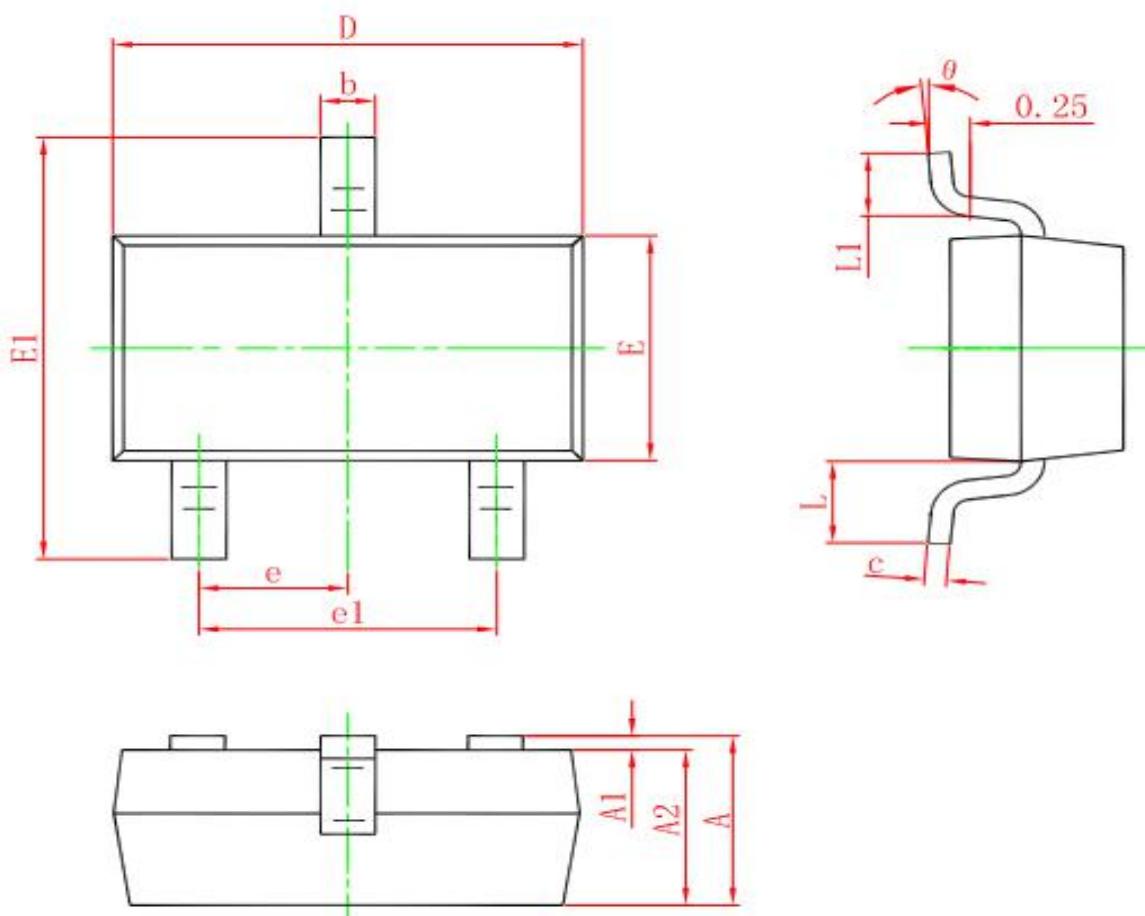
### Electrical Characteristics (@Ta=25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse voltage	V(BR)	IR=100μA	30			V
	VF1	IF=0.1mA			0.24	V
	VF2	IF=1mA			0.32	V
	VF3	IF=10mA			0.4	V
	VF4	IF=30mA			0.5	V
Forward voltage	VF5	IF=100mA			1	V
	IR	VR=70V			2	uA
	Ctot	VR=0V,f=1MHz			10	PF
	t <sub>rr</sub>	IF=IR=10mA, Irr=0.1×IR,RL= 100 Ω			5	nS

### Typical Characteristics



### SOT-23 PACKAGE OUTLINE DIMENSIONS



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°