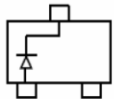
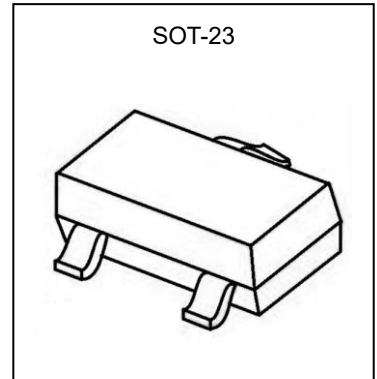




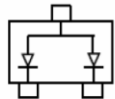
BAT54/A/C/S Schottky Barrier Diode

Feature

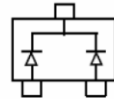
- Extremely Fast Switch Speed
- Low Forward Voltage



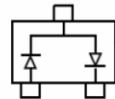
BAT54 MARKING: KL1



BAT54A MARKING: KL2



BAT54C MARKING: KL3



BAT54S MARKING: KL4

MARKING:

BAT54	BAT54A	BAT54C	BAT54S

ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

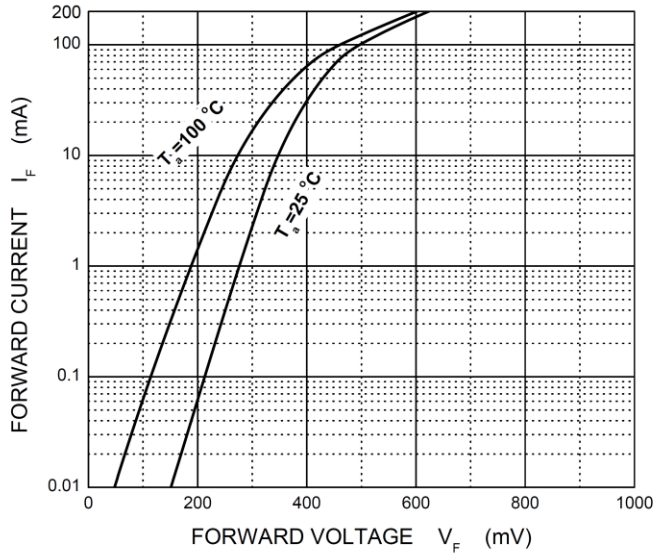
Parameter	Symbol	Value	Unit
DC reverse voltage	V_R	30	V
Mean rectifying current	I_o	0.2	A
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	0.6	A
Power Dissipation	P_D	0.2	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	500	$^{\circ}\text{C}/\text{W}$
Junction Temperature	T_J	125	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 ~ +150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

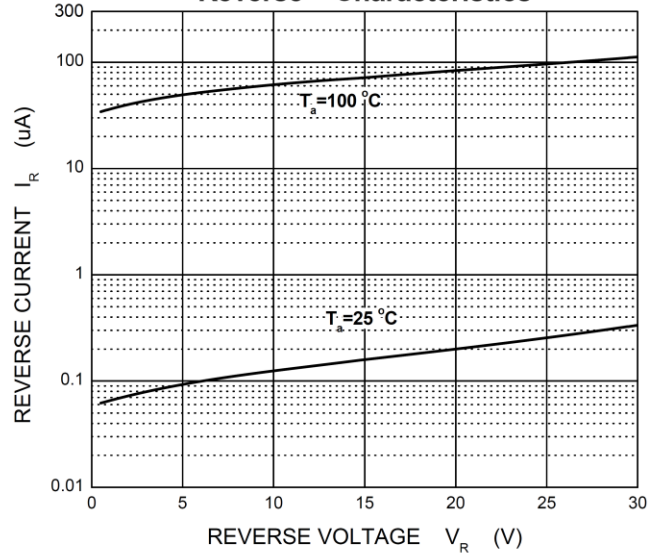
Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	30			V
Forward voltage	V_{F1}	$I_F=0.1\text{mA}$			0.24	V
	V_{F2}	$I_F=1\text{mA}$			0.32	V
	V_{F3}	$I_F=10\text{mA}$			0.40	V
	V_{F4}	$I_F=30\text{mA}$			0.50	V
	V_{F5}	$I_F=100\text{mA}$			1	V
Reverse current	I_R	$V_R=25\text{V}$			2	μA
Reverse recovery time	t_{rr}	$I_F=I_R=10\text{mA}$, $I_{rr}=0.1^* I_R$, $R_L=100\Omega$			5	ns
Capacitance between terminals	C_T	$V_R=1\text{V}$, $f=1\text{MHz}$			10	pF

Typical Characteristics

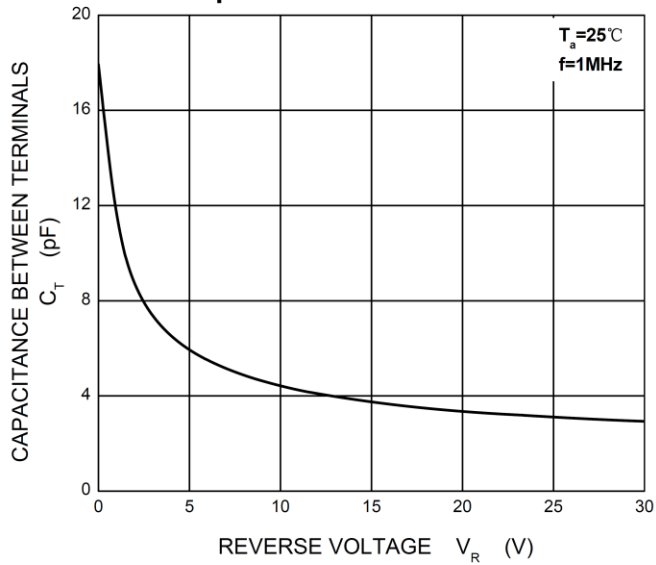
Forward Characteristics



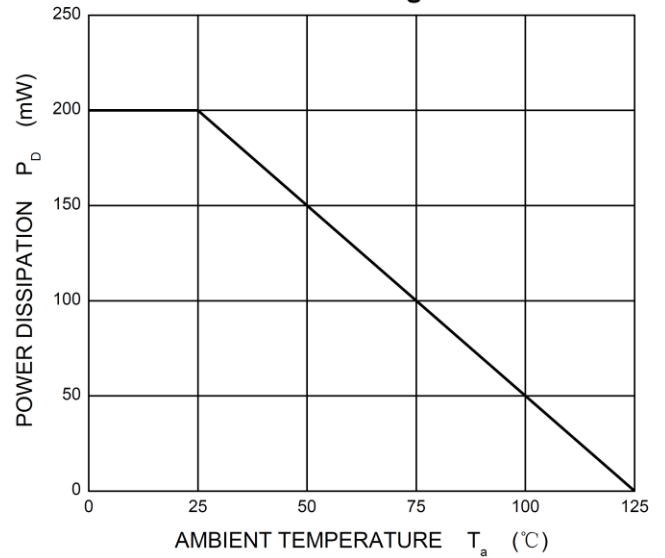
Reverse Characteristics

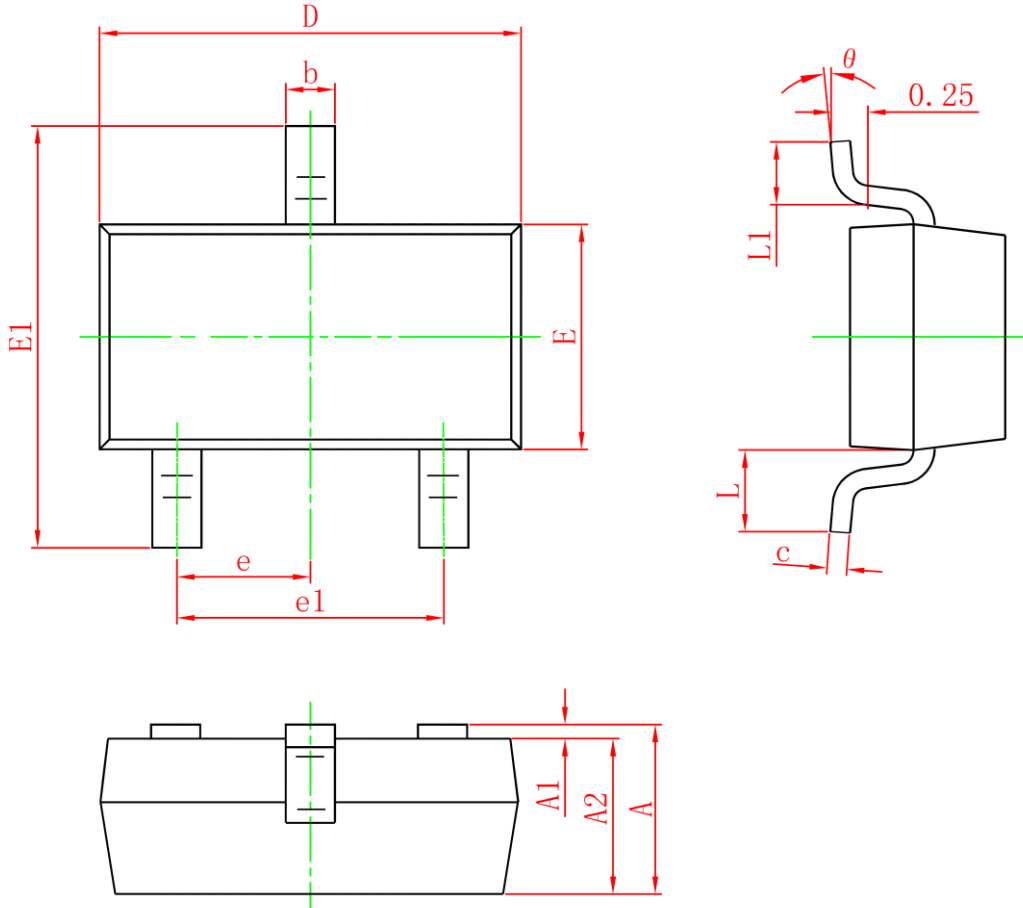


Capacitance Characteristics



Power Derating Curve



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	0.100	0	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	1.150	1.500	0.045	0.059
E1	2.250	2.650	0.089	0.104
e	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.550REF		0.022REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°