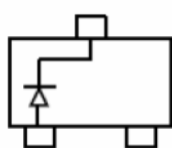
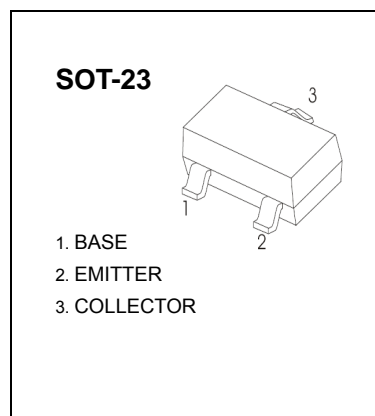


SOT-23 Plastic-Encapsulate Transistors

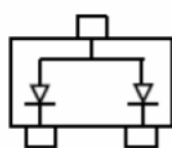
BAT54/A/C/S SCHOTTKY BARRIER DIODE

FEATURES

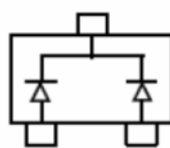
- Extremely Fast Switching Speed



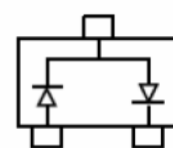
BAT54 MARKING: KL1/D3E



BAT54A MARKING: KL2



BAT54C MARKING: KL3



BAT54S MARKING: KL4

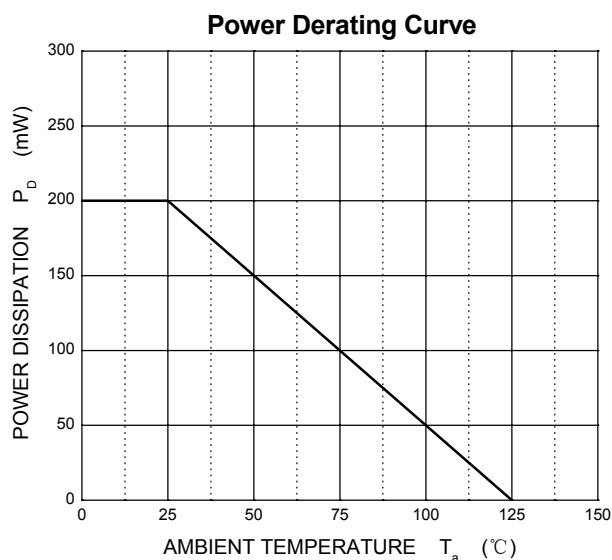
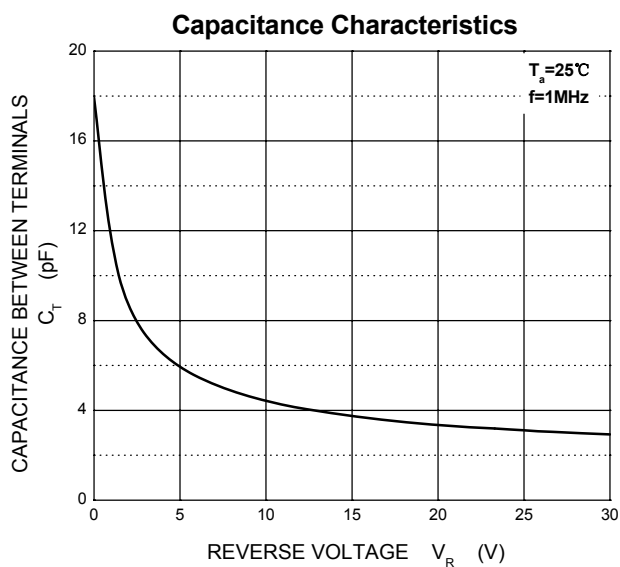
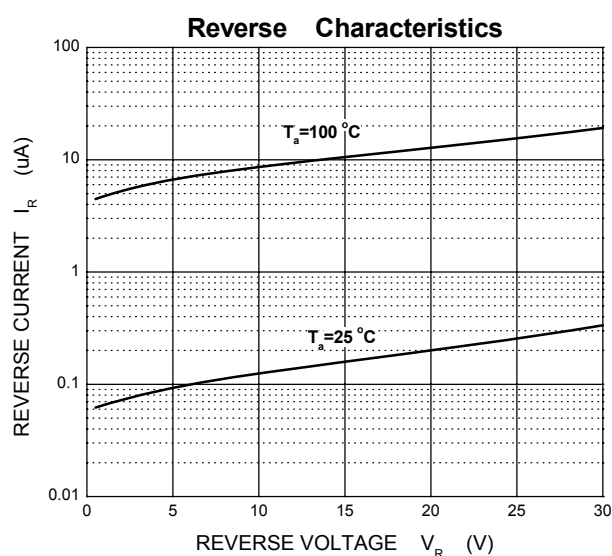
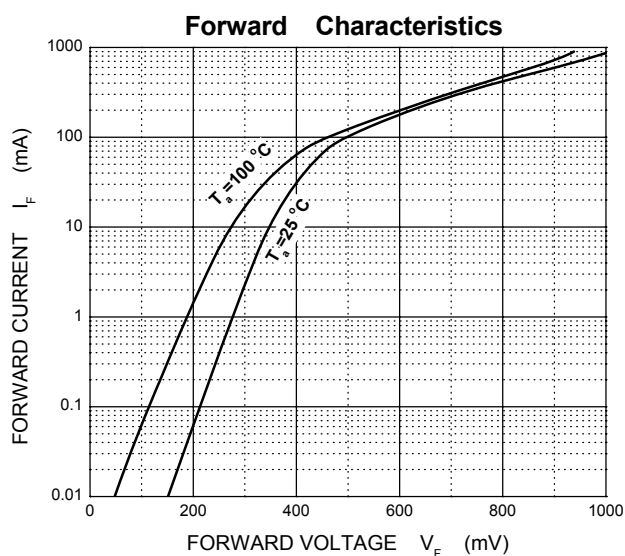
MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	30	V
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
Forward Continuous Current	I _{FM}	200	mA
Non-repetitive Peak Forward Surge Current @ t < 1s	I _{FSM}	600	mA
Repetitive Peak Forward Current @ t ≤ 1s, δ ≤ 0.5	I _{FRM}	300	mA
Power Dissipation	P _D	200	mW
Thermal Resistance from Junction to Ambient	R _{θJA}	500	°C/W
Junction Temperature	T _j	125	°C
Storage Temperature	T _{stg}	-55~+150	°C

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

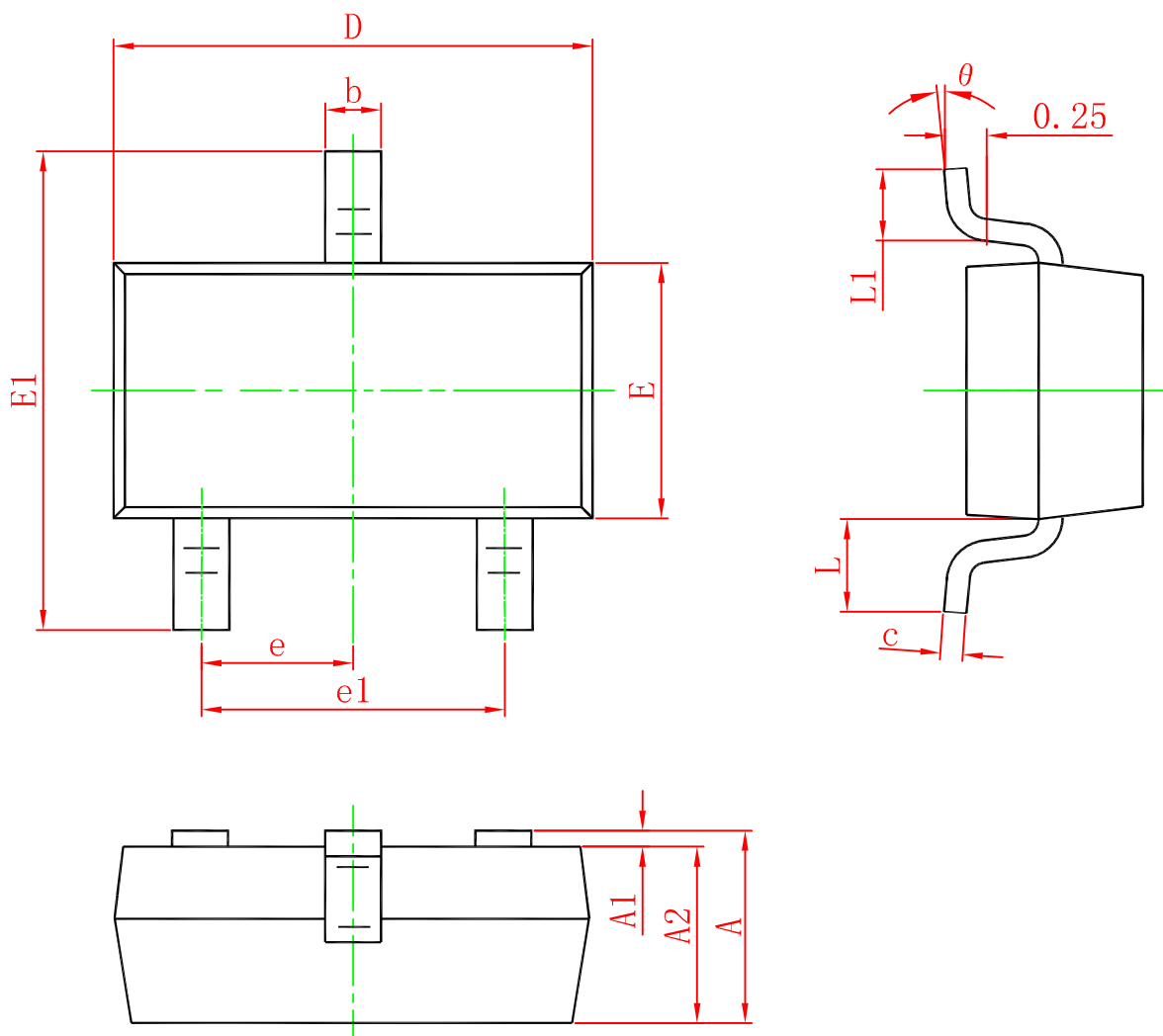
Parameter	Symbol	Min	Typ	Max	Unit	Test conditions
Reverse voltage	V _(BR)	30			V	I _R =100μA
Forward voltage	V _F			0.24	V	I _{F1} =0.1mA
				0.32	V	I _{F2} =1mA
				0.40	V	I _{F3} =10mA
				0.50	V	I _{F4} =30mA
				1	V	I _{F5} =100mA
Reverse current	I _R			2	μA	V _R =25V
Diode capacitance	C _D			10	pF	V _R =1V, f=1MHz
Reverse recovery time	t _{rr}			5	ns	I _F =I _R =10mA I _{rr} =0.1 × I _R , R _L =100 Ω

Typical Characteristics



SOT-23 Plastic-Encapsulate Transistors

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°