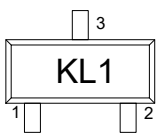
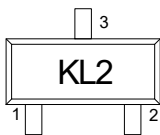
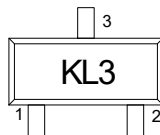
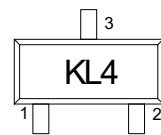
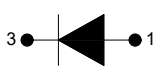
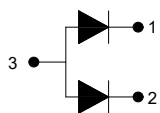
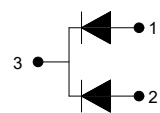
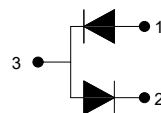


Plastic-Encapsulate Diodes

1. Marking and Circuit

BAT54	BAT54A	BAT54C	BAT54S
			
			

2. Specification

Absolute Maximum Rating & Thermal Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

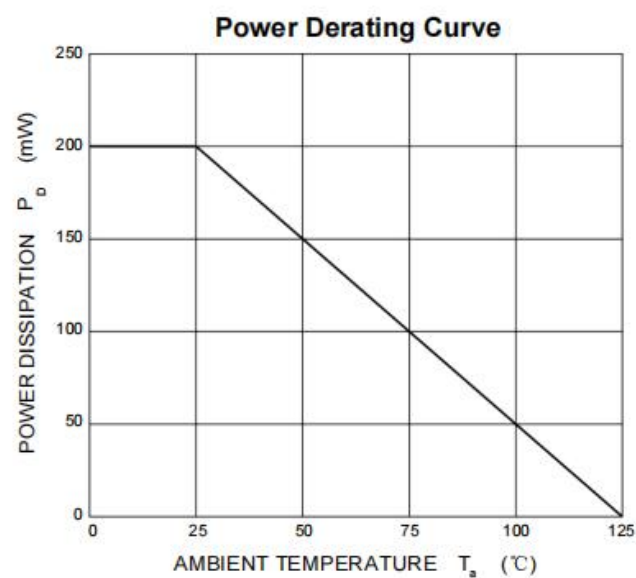
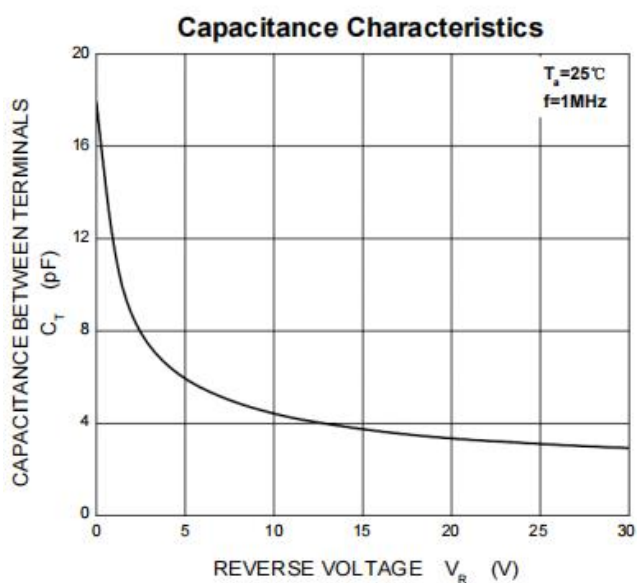
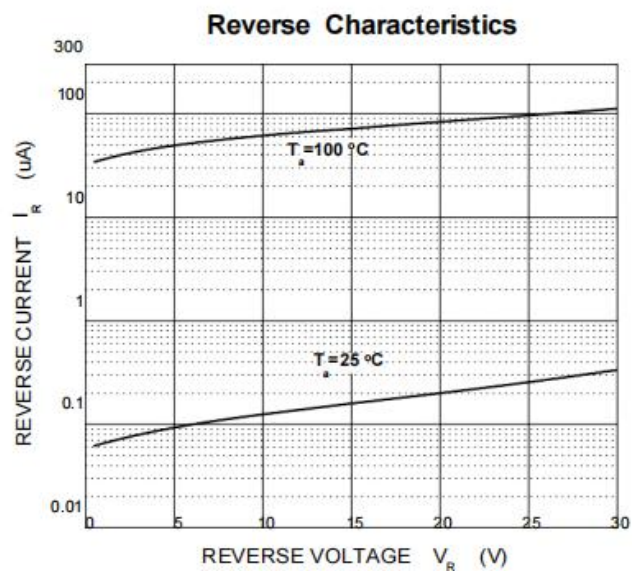
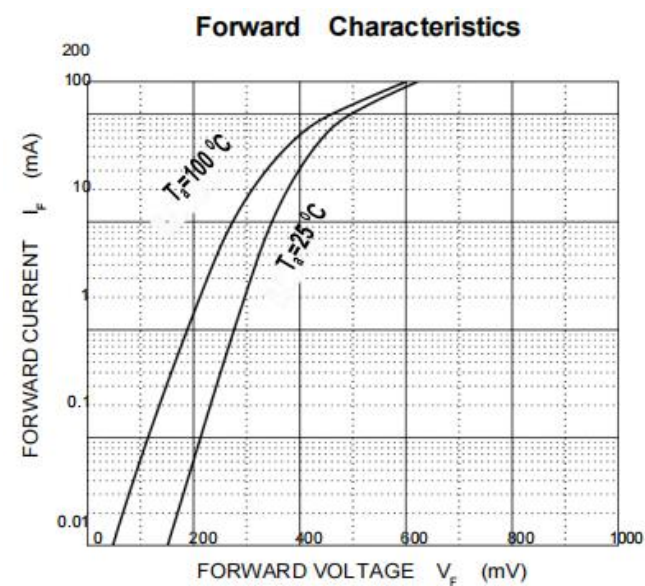
Parameters	Symbol	Limit	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	30	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
Forward Continuous Current	I_{FM}	200	mA
Peak forward surge current 8.3ms single half sine-wave	I_{FSM}	600	mA
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	500	°C/W
Power Dissipation	P_D	200	mW
Junction Temperature	T_J	125	°C
Storage temperature range	T_{STG}	-50~150	°C

Electrical Characteristics

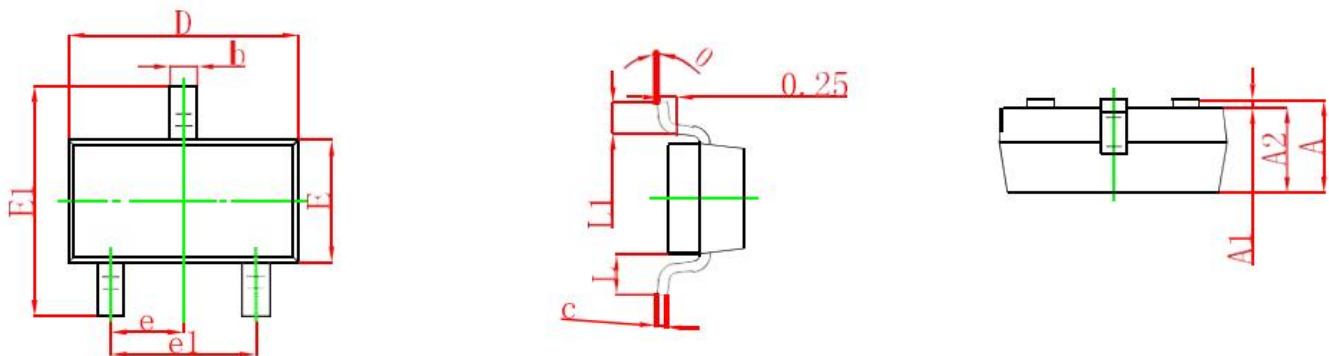
At $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Maximum forward voltage	V_F	$I_F=0.1\text{mA}$			240	mV
		$I_F=1.0\text{mA}$			320	
		$I_F=10\text{mA}$			400	
		$I_F=30\text{mA}$			500	
		$I_F=100\text{mA}$			1000	
Maximum reverse breakdown voltage	V_R	$I_R=100\mu\text{A}$	30			V
Maximum reverse leakage current	I_R	$V_R=25\text{V}$			2.0	μA
Type junction capacitance	C_j	$V_R=1.0\text{V}$, $f=1\text{MHz}$			10	pF
Reverse recovery time	T_{rr}	$I_F=I_R=10\text{mA}$ $I_{rr}=0.1X I_R$, $R_L=100\Omega$			5	ns

3. Typical Characteristic

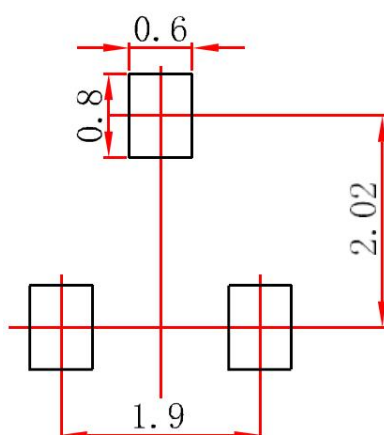


4. Dimension (SOT-23)



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°

5. Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

Notice

1. All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise. The right to explain is owned by CCX electronics company.
2. Confirm that operation temperature is within the specified range described in the product specification.

Avoid applying power exceeding normal rated power; exceeding the power rating under steady-state loading condition may negatively affect product performance and reliability.
3. CCX shall not be in any way responsible or liable for failure induced under deviant condition from what is defined in this document.