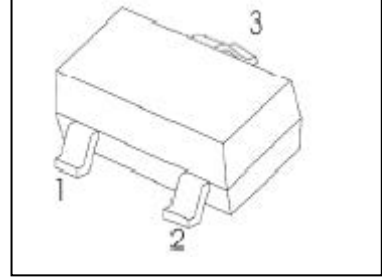


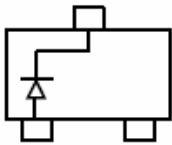
BAT54/A/C/S SCHOTTKY BARRIER DIODE

SOT-23

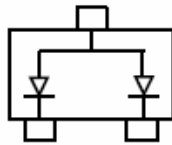


FEATURES

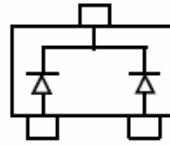
- Extremely Fast Switching Speed



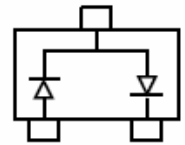
BAT54 MARKING: KL1



BAT54A MARKING: KL2



BAT54C MARKING: KL3



BAT54S MARKING: KL4

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

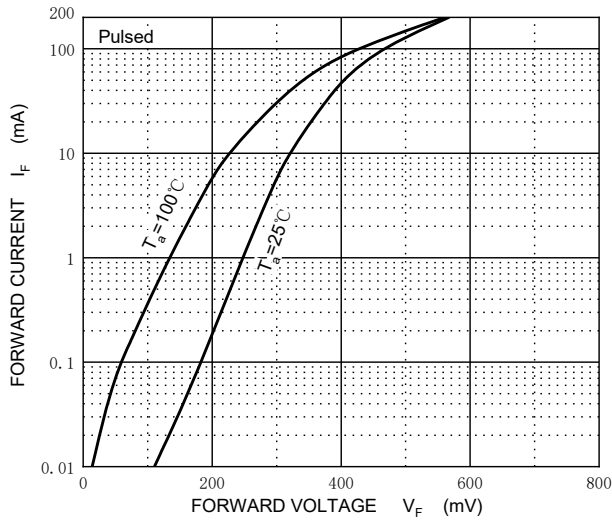
Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	30	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
Forward Continuous Current	I_{FM}	200	mA
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	600	mA
Power Dissipation	P_D	225	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	508	$^{\circ}\text{C}/\text{W}$
Operating Junction Temperature Range	T_j	-55 ~ +150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ +150	$^{\circ}\text{C}$

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

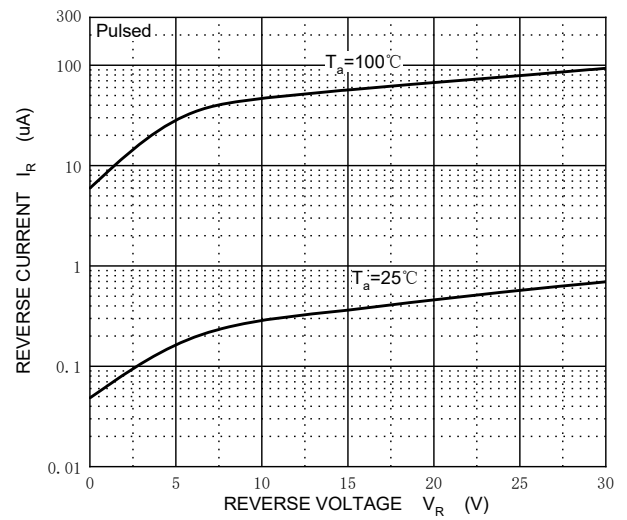
Parameter	Symbol	Min	Typ	Max	Unit	Test conditions
Reverse voltage	$V_{(BR)}$	30			V	$I_R=100\mu\text{A}$
Forward voltage	V_F			0.24	V	$I_{F1}=0.1\text{mA}$
				0.32	V	$I_{F2}=1\text{mA}$
				0.40	V	$I_{F3}=10\text{mA}$
				0.50	V	$I_{F4}=30\text{mA}$
				1	V	$I_{F5}=100\text{mA}$
Reverse current	I_R			2	μA	$V_R=25\text{V}$
Diode capacitance	C_D			10	pF	$V_R=1\text{V}, f=1\text{MHz}$
Reverse recovery time	t_{rr}			5	ns	$I_F=I_R=10\text{mA}$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$

Typical Characteristics

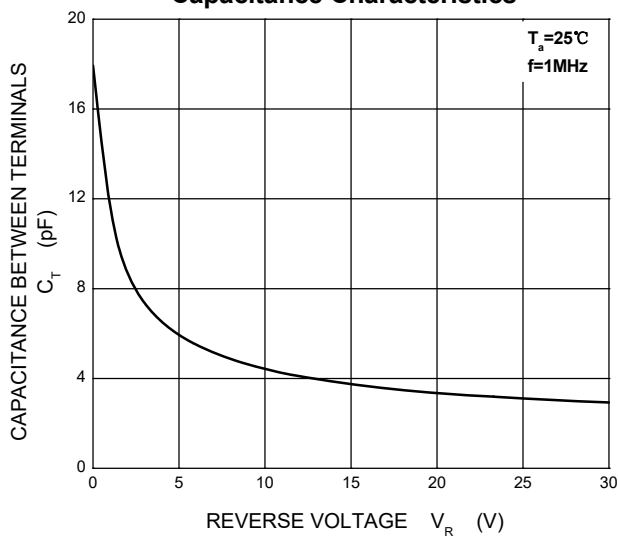
Forward Characteristics



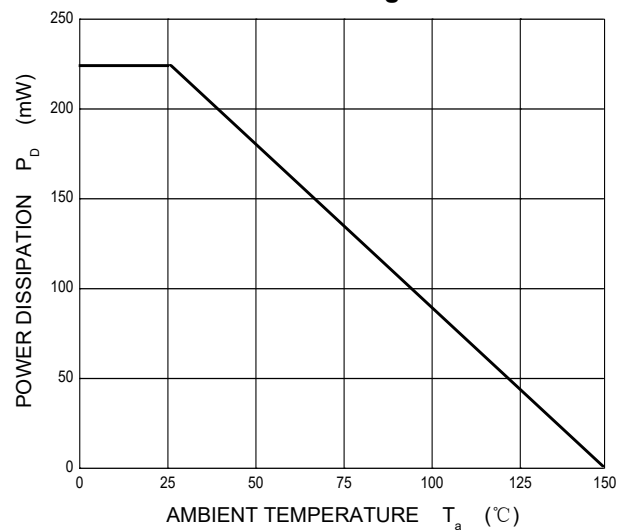
Reverse Characteristics



Capacitance Characteristics

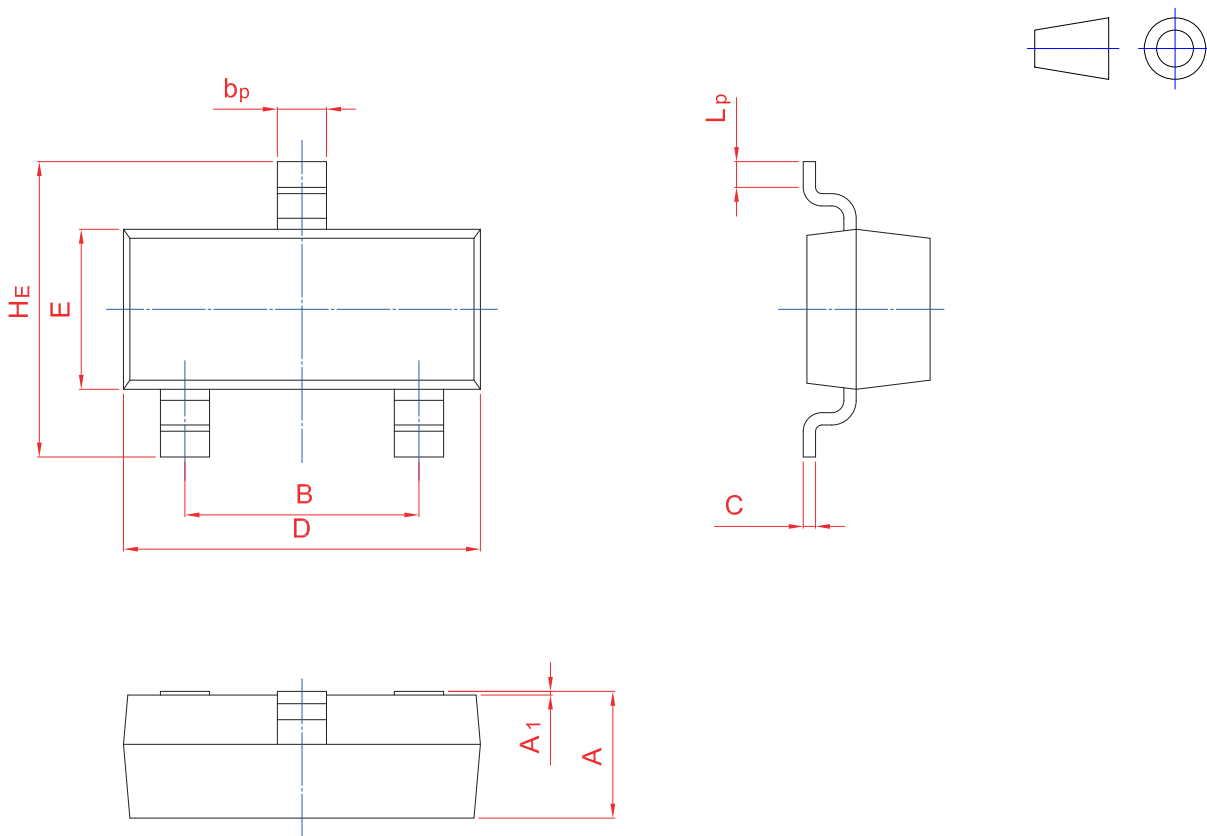


Power Derating Curve



Package Outline

SOT-23



UNIT	A	B	bp	C	D	E	HE	A ₁	L _p
mm	1.40	2.04	0.51	0.19	3.10	1.65	3.00	0.100	0.50
	0.89	1.78	0.30	0.08	2.70	1.20	2.20	0.013	0.20