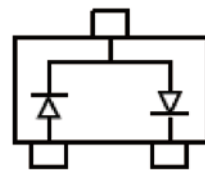


Features

- Low forward and reverse recovery times.



SOT23



Equivalent Circuit

Absolute Maximum Ratings($T_A=25^{\circ}\text{C}$)

Symbol	Parameter	Value	Unit
V_{RRM}	Peak Repetitive Peak Reverse Voltage	30	V
V_{RWM}	Working Peak Reverse Voltage		
V_R	DC Blocking Voltage		
I_{FM}	Forward Continuous Current	200	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current@8.3mS	600	mA
I_{FRM}	Repetitive peak forward surge current	300	mA
P_d	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	400	$^{\circ}\text{C}/\text{W}$
T_J	Operation Junction Temperature Range	$-40\sim+125$	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	$-55\sim+150$	$^{\circ}\text{C}$

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse breakdown voltage	$I_R=100\mu\text{A}$	30			V
I_R	Reverse current	$V_R=25\text{V}$			2	μA
V_F	Forward voltage	$I_F=0.1\text{mA}$			0.24	V
		$I_F=1\text{mA}$			0.32	V
		$I_F=10\text{mA}$			0.40	V
		$I_F=30\text{mA}$			0.50	V
		$I_F=100\text{mA}$			1.0	V
C_D	Diode capacitance	$V_R=1\text{V}$, $f=1\text{MHz}$			10	pF
t_{rr}	Reverse recovery time	$I_F=I_R=10\text{mA}$, $I_{rr}=0.1\times I_R$, $R_L=100\Omega$			5	nS

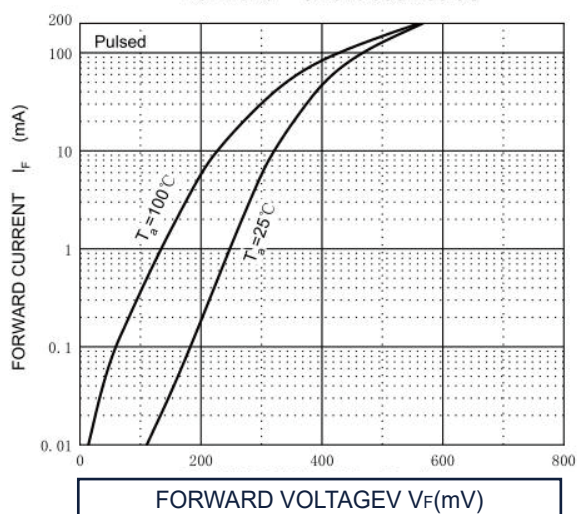
Ordering information

Product ID	Marking	Naming rule	Pack	Qty(PCS)
BAT54S	KL4	BAT54S ↓ 产品名称 product name	SOT23	3000

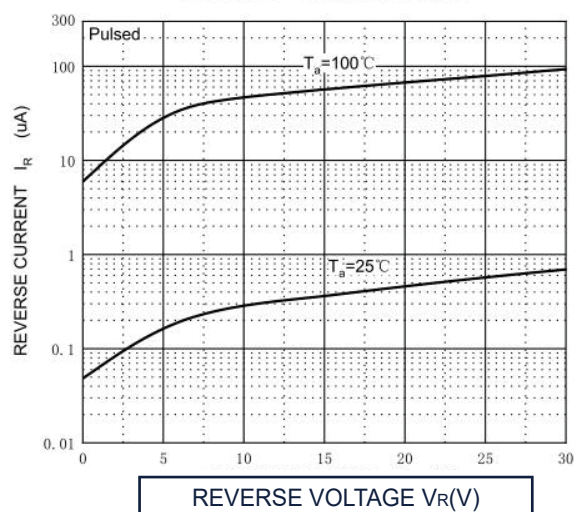


Typical Characteristics

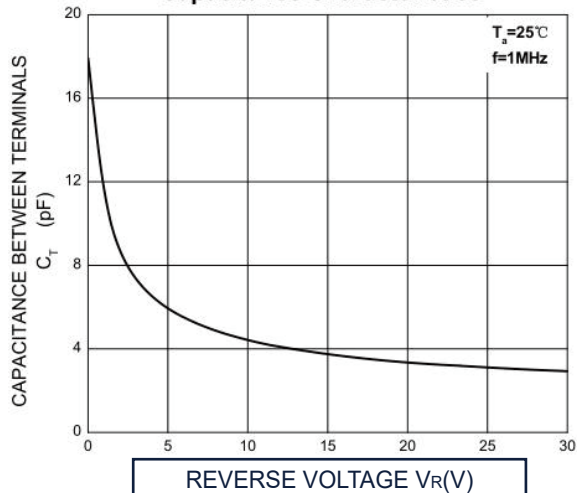
Forward Characteristics



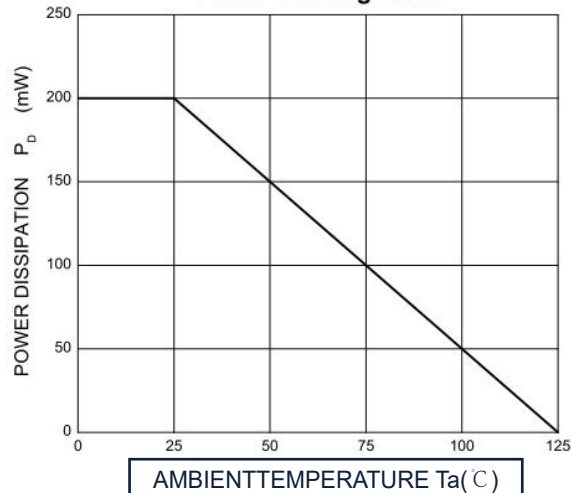
Reverse Characteristics



Capacitance Characteristics

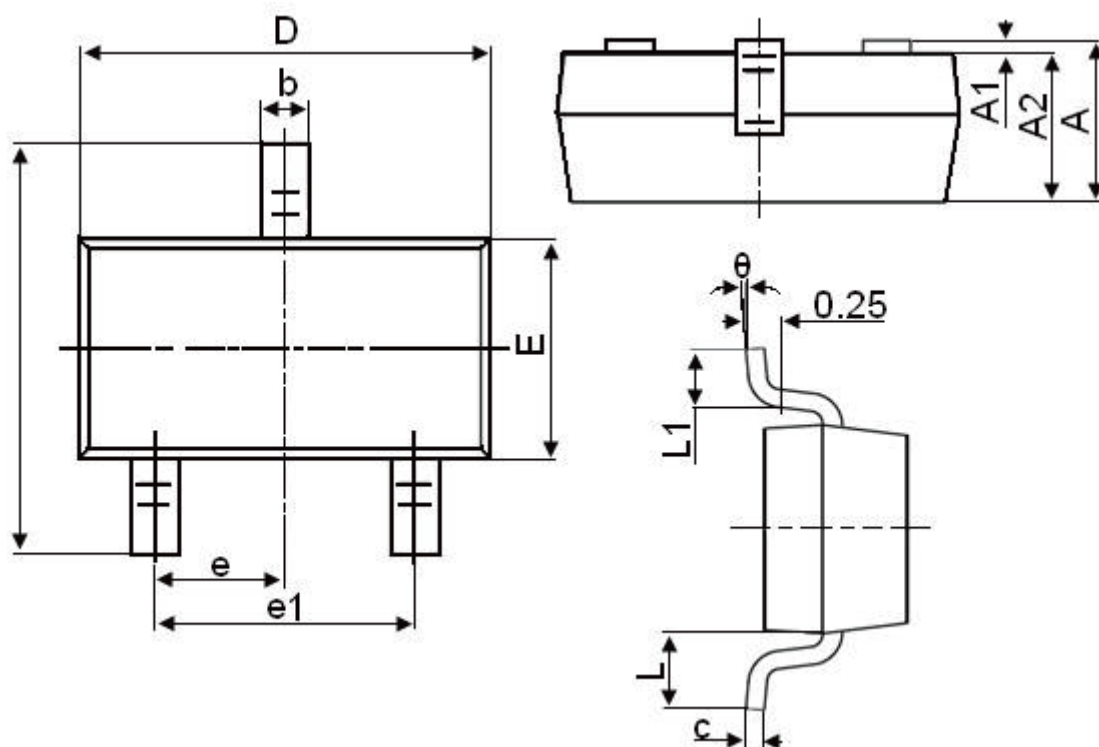


Power Derating Curve





SOT23 Package Outline Dimensions



Symbol	Dimensions in Millimeters	
	mm	
	Min	Max
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
θ	0°	8°