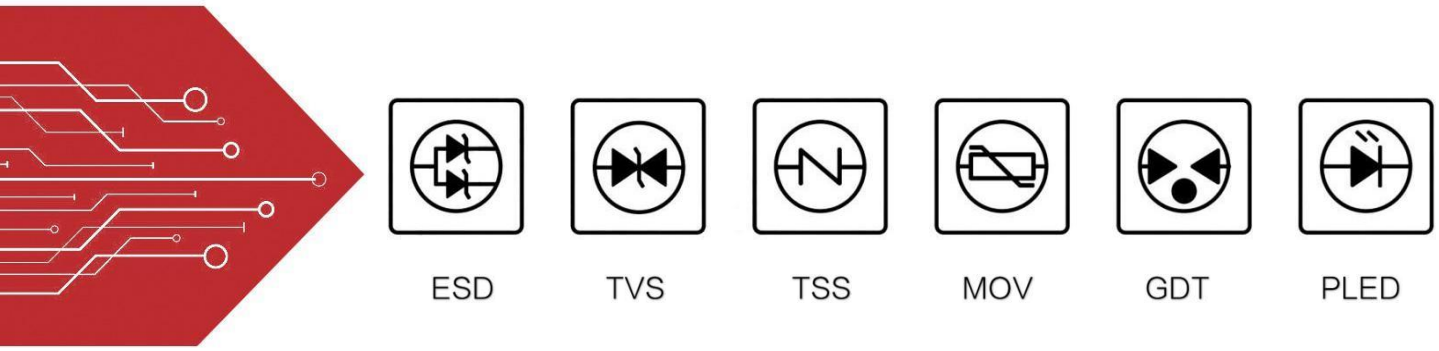
MSKSEMI
SEMICONDUCTOR

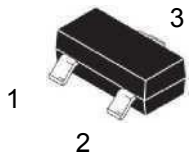


Product data sheet

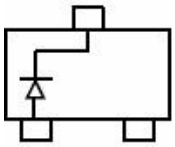
www.msksemi.com

FEATURES

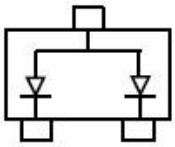
Extremely Fast Switching Speed



SOT-23



BAT54 MARKING: KL1



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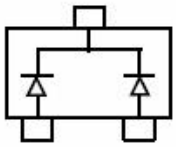

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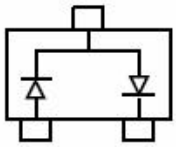


BAT54S MARKING: KL4

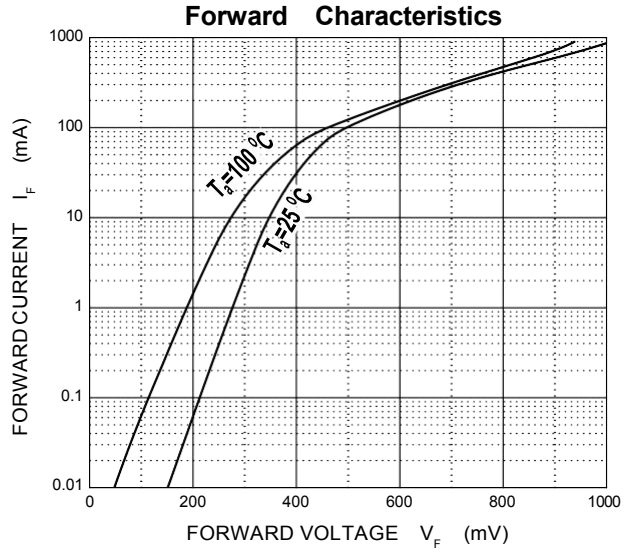
Maximum Ratings @T_A=25℃

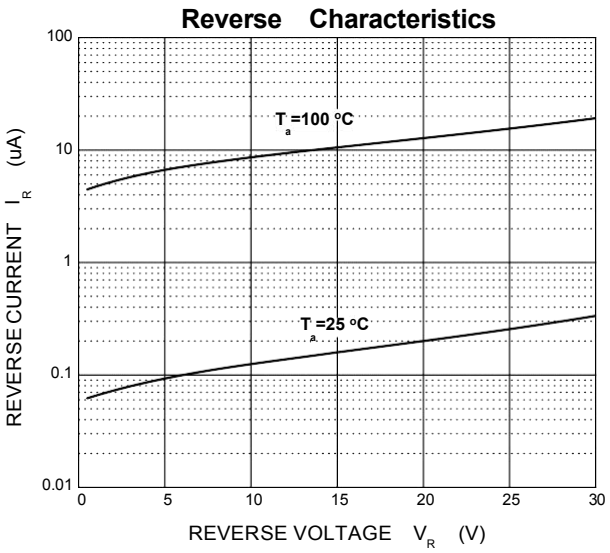
Parameter	Symbol	Limits	Unit
Peak Repetitive Peak reverse voltage **Working Peak Reverse Voltage**	V_{RRM} V_{RWM} V_R	30	V
Forward Continuous Current	I_{FM}	200	mA
Power Dissipation	P_D	200	mW
Storage temperature	T_{STG}	-55-150	℃

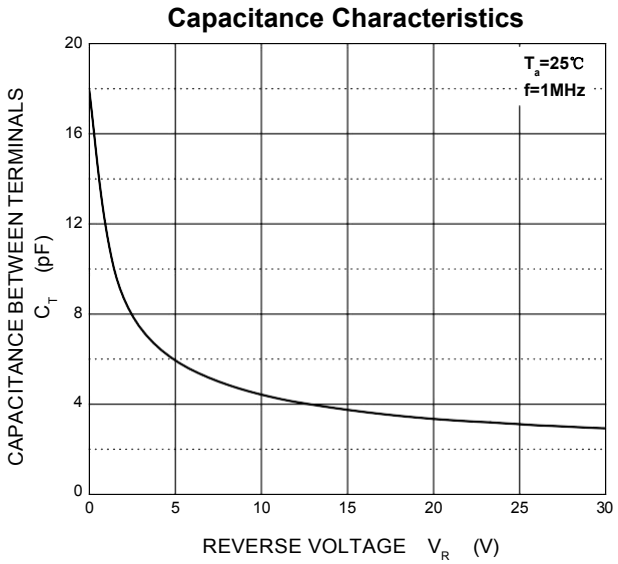
Electrical Characteristics @T_A=25℃

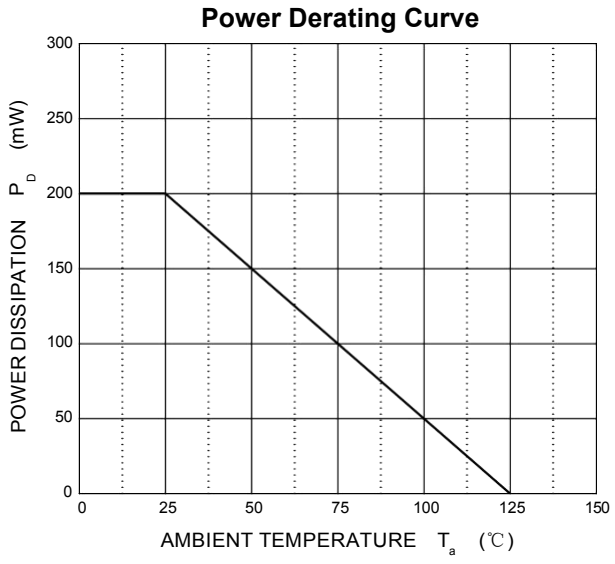
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)R}$	30			V	IR=100μA
Forward voltage	V_{F1}			0.24	V	I_F=0.1mA
	V_{F2}			0.32	V	I_F=1mA
	V_{F3}			0.40	V	I_F=10mA
	V_{F4}			0.50	V	I_F=30mA
	V_{F5}			1	V	I_F=100mA
Reverse current	I_R			2	μA	V_R=25V
Diode Capacitance	C_D			10	pF	V_R=1V,f=1MHz
Reverse Recovery Time	t_{rr}			5	nS	I_F=I_R=10mA Irr=0.1XI_R,R_L=100Ω

Typical Characteristics

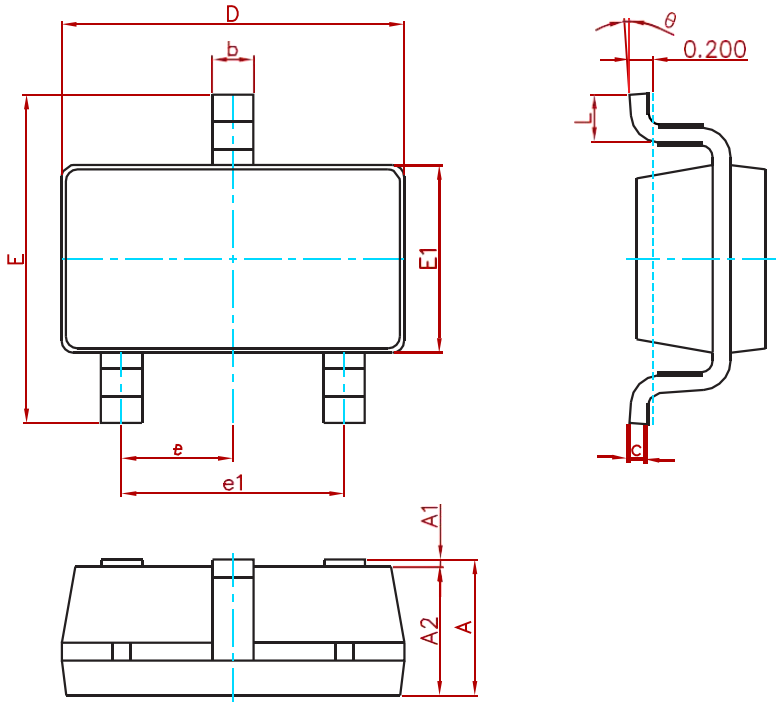






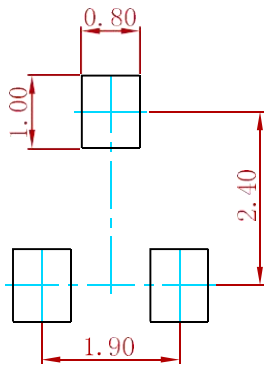


PACKAGE MECHANICAL DATA



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.300	0.500	0.012	0.020
c	0.100	0.200	0.004	0.008
D	2.820	3.020	0.111	0.119
E1	1.500	1.700	0.059	0.067
E	2.650	2.950	0.104	0.116
e	0.950(BSC)		0.037(BSC)	
e1	1.800	2.000	0.071	0.079
L	0.300	0.600	0.012	0.024
0	0°	8°	0°	8°

Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:±0.05mm.
3.The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
BAT54/A/C/S	SOT-23	3000

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