

MSKSEMI

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT

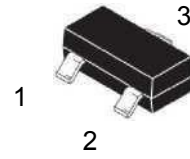


PLED

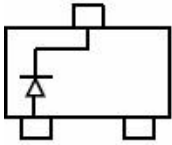
Product data sheet

FEATURES

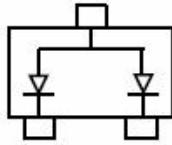
Extremely Fast Switching Speed



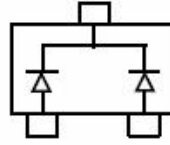
SOT-23



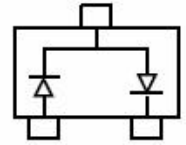
BAT54 MARKING: KL1



BAT54A MARKING: KL2



BAT54C MARKING: KL3



BAT54S MARKING: KL4

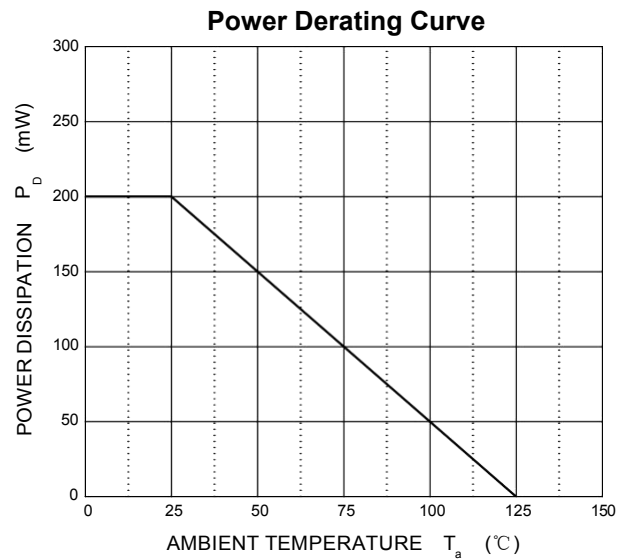
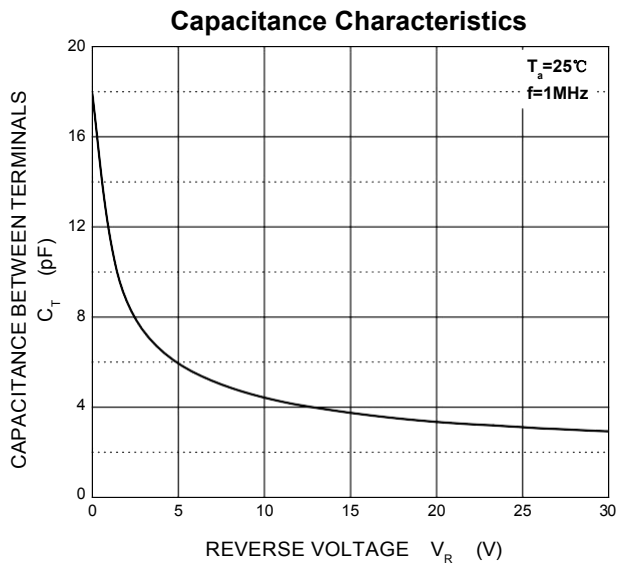
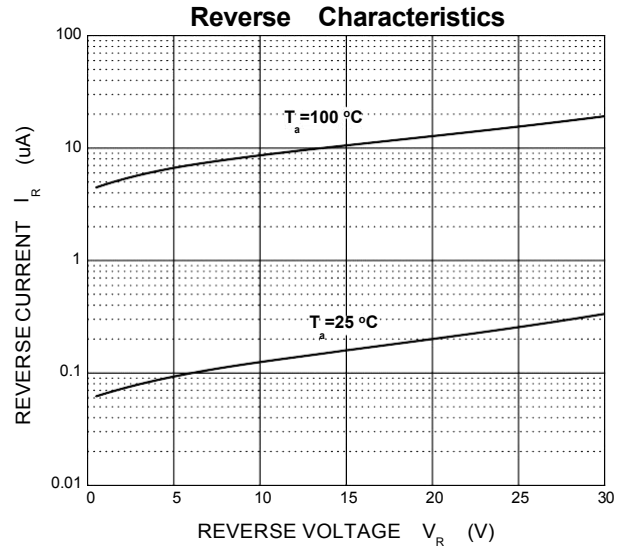
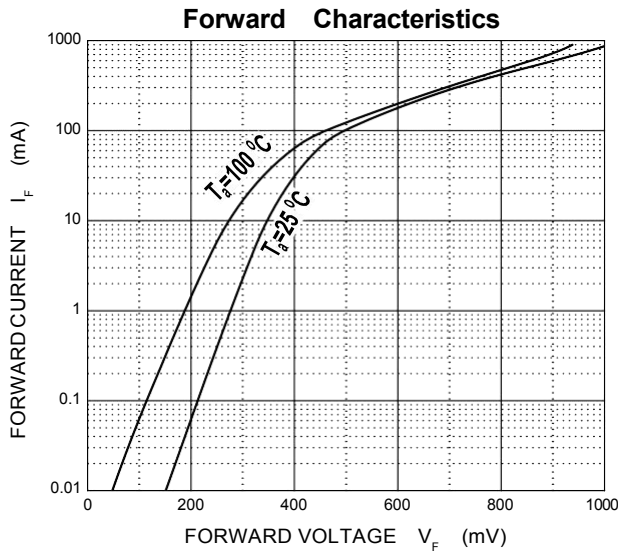
Maximum Ratings @T_A=25°C

Parameter	Symbol	Limits	Unit
Peak Repetitive Peak reverse voltage	V _{RRM}	30	V
Working Peak Reverse Voltage	V _{RWM}		
	V _R		
Forward Continuous Current	I _{FM}	200	mA
Power Dissipation	P _D	200	mW
Storage temperature	T _{STG}	-55-150	°C

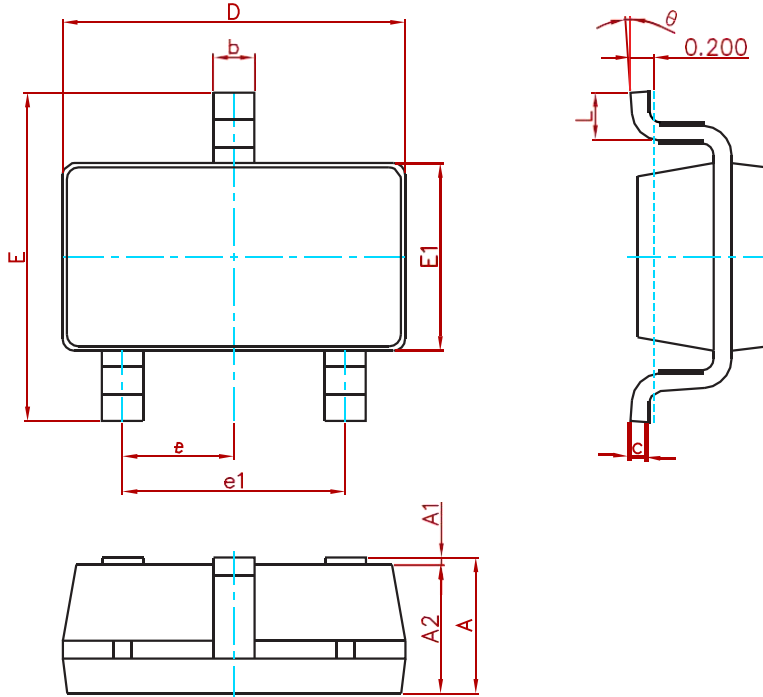
Electrical Characteristics @T_A=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	V _{(BR)R}	30			V	I _R =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 I _{rr} =0.1X I _R , R _L =100Ω

Typical Characteristics

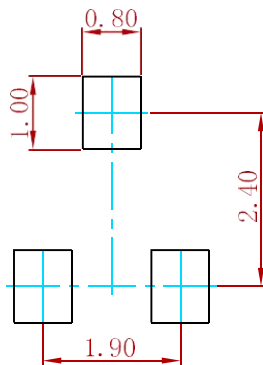


PACKAGE MECHANICAL DATA



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
θ	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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