

BAT54/A/C/S

SURFACE MOUNT SCHOTTKY BARRIER

VOLTAGE 30 Volt **CURRENT** 0.2Ampere

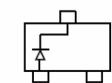
SOT-23 Unit:mm

FEATURES

- Extremely Fast Switching Speed
- Low Forward Voltage
- Lead free in compliance with EU RoHS

MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



BAT54 MARKING: KL1



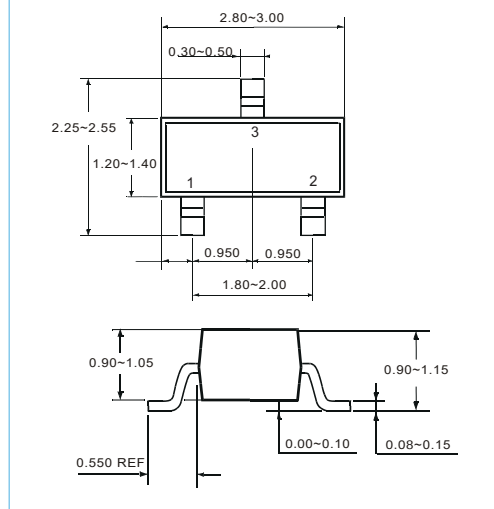
BAT54A MARKING: KL2



BAT54C MARKING: KL3



BAT54S MARKING: KL4



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS($T_A = 25^\circ\text{C}$ unless otherwise noted)

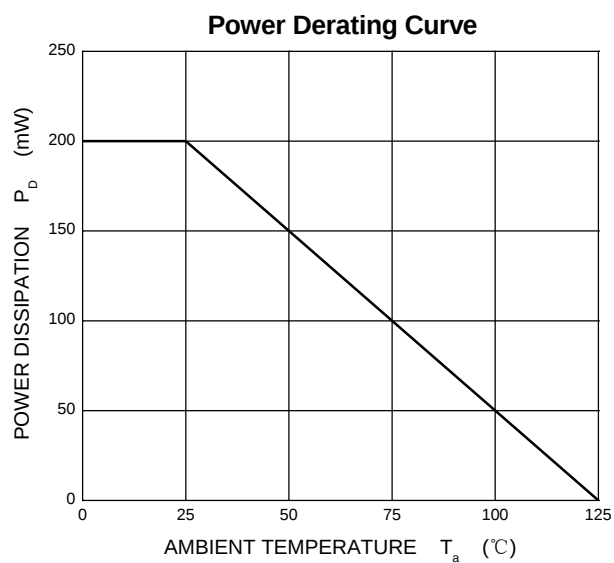
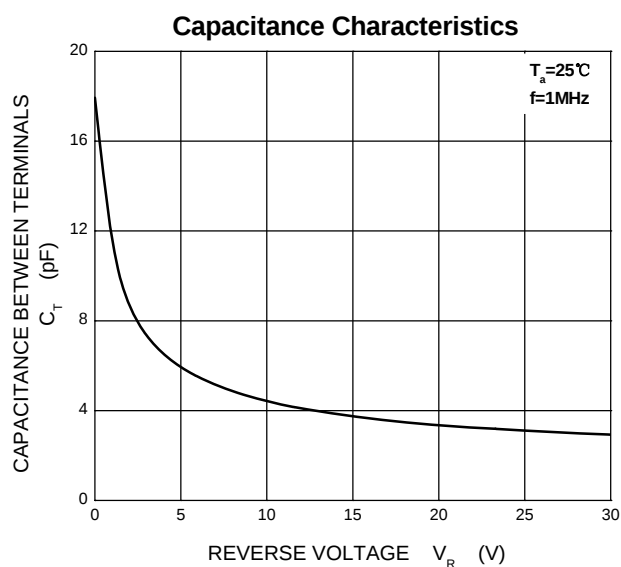
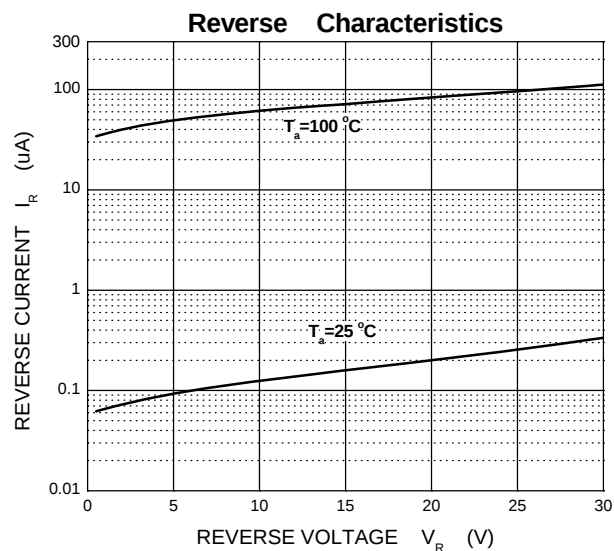
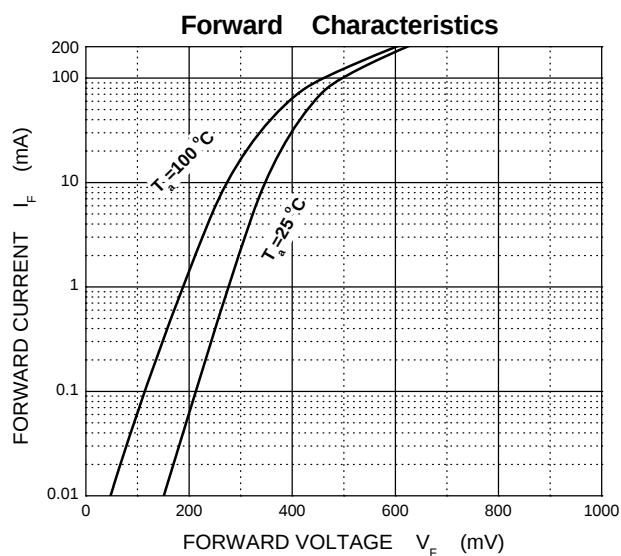
Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	30	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
Forward Continuous Current	I_{FM}	200	mA
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	600	mA
Repetitive Peak Forward Current @ $t \leq 1\text{s}, \delta \leq 0.5$	I_{FRM}	300	mA
Power Dissipation	P_D	200	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	500	$^\circ\text{C/W}$
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55~+150	$^\circ\text{C}$

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

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	$I_F=0.1\text{mA}$
				0.32	V	$I_F=1\text{mA}$
				0.40	V	$I_F=10\text{mA}$
				0.50	V	$I_F=30\text{mA}$
				1	V	$I_F=100\text{mA}$
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	$I_F=I_R=10\text{mA}, I_{RR}=0.1I_R, R_L=100\Omega$

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Typical Characteristics

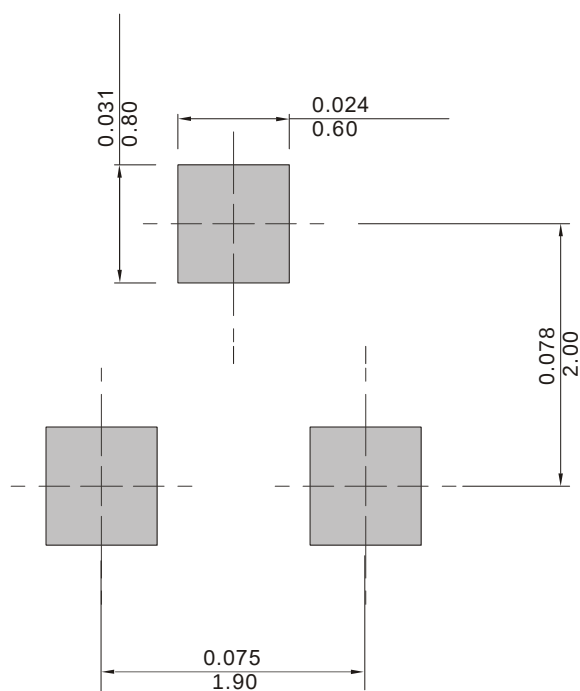


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MOUNTING PAD LAYOUT

SOT-23

Unit:Inch(mm)



ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
BAT54/A/C/S	SOT-23	7 Inch	3000