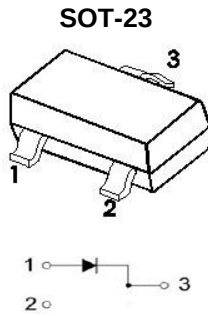


SOT-23 贴片塑封肖特基二极管

SOT-23 Plastic-Encapsulate Schottky Barrier Diode



MARKING:KL1

特征 Features

- 大电流承受能力。High Current Capability
- 正向压降低。Low Forward Voltage Drop
- 开关速度快。Extremely Fast Switching Speed

机械数据 Mechanical Data

- 封装: SOT-23 封装 SOT-23 Small Outline Plastic Package
- 环氧树脂UL易燃等级Eproxy UL:94V-0
- 安装位置: 任意 Mounting Position: Any
- Device meets MSL 1 requirements

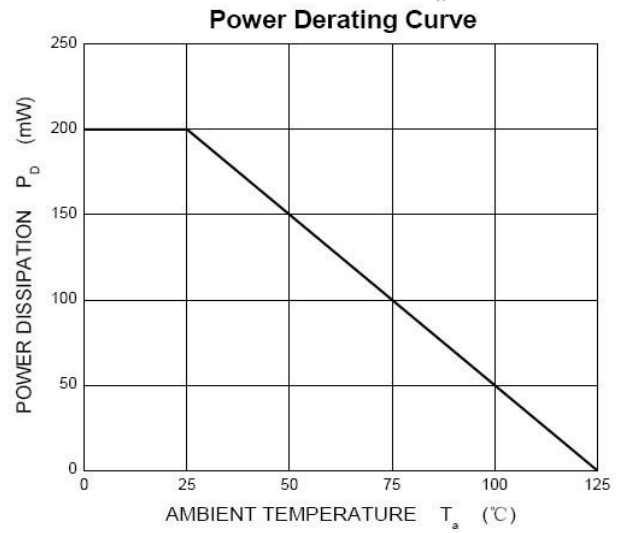
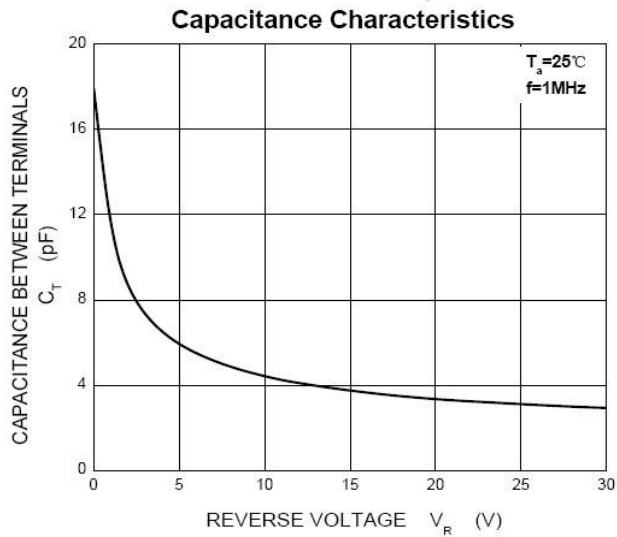
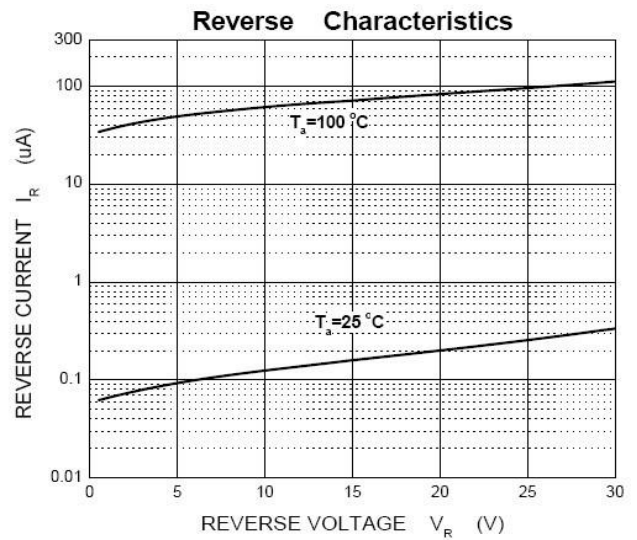
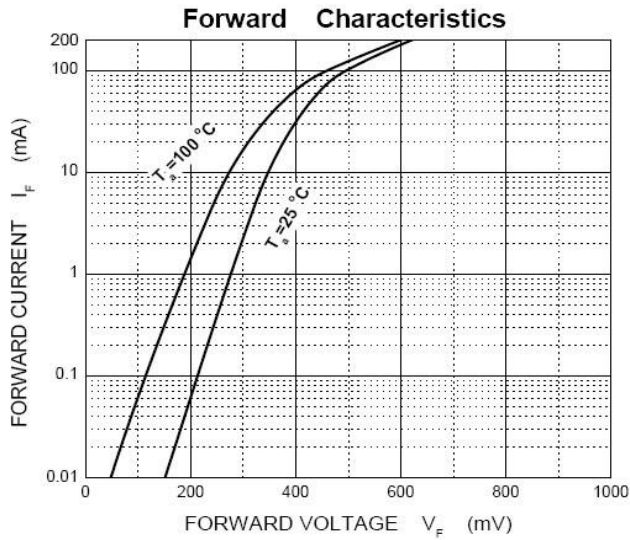
极限值和温度特性($T_A = 25^\circ\text{C}$ 除非另有规定)Maximum Ratings & Thermal Characteristics ($T_A=25^\circ\text{C}$ unless otherwise specified)

参数 Parameters	符号 Symbol	数值 Value	单位 Unit
最大可重复峰值反向电压 Maximum repetitive peak reverse voltage	V_{RRM}	30	V
最大均方根电压 Maximum RMS voltage	V_{RMS}	21	V
最大直流阻断电压 Maximum DC blocking voltage	V_{DC}	30	V
最大正向平均整流电流 Maximum average forward rectified current	I_{FM}	200	mA
峰值正向浪涌电流8.3ms单一正弦半波 Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	600	mA
典型热阻 Typical thermal resistance	$R_{\theta JA}$	500	$^\circ\text{C}/\text{W}$
功率消耗 Power Dissipation	PD	200	mW
结温 Junction Temperature	T_j	125	$^\circ\text{C}$
存储温度 Storage temperature range	T_{stg}	-50-+150	$^\circ\text{C}$

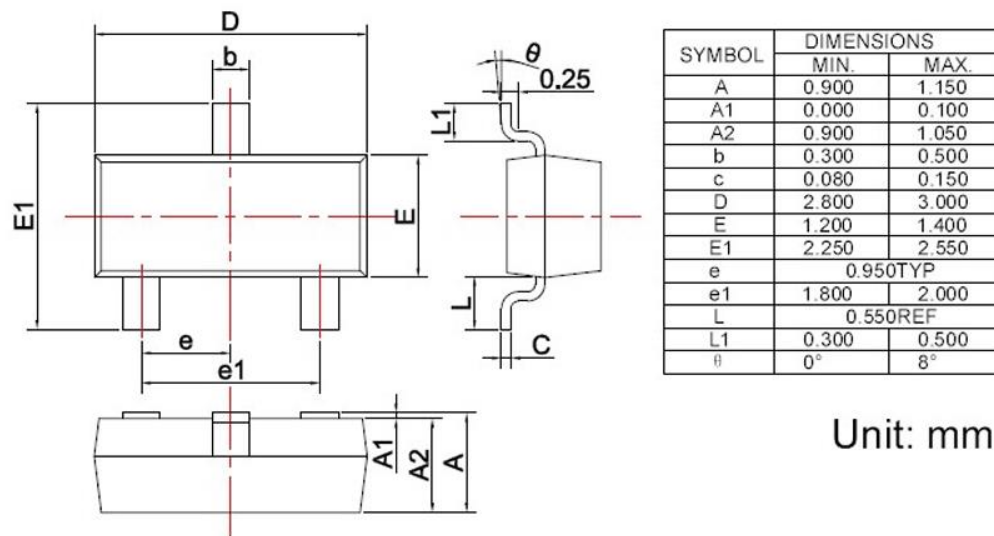
电特性 Electrical Characteristics($T_A=25^\circ\text{C}$ unless otherwise specified)

参数 Parameter	符号 Symbols	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
正向电压 Forward Voltage	V_F	$I_F=0.1\text{mA}$	---	0.24	V
		$I_F=1.0\text{mA}$	---	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
反向电压 Reverse breakdown voltage	V_R	$I_R=100\mu\text{A}$	30	---	V
反向电流 Reverse current	I_R	$V_R=25\text{V}$	---	2.0	μA
典型结电容 Type junction capacitance	C_J	$V_R=0\text{V}, f=1\text{MHz}$	---	10	pF
反向恢复时间 Reverse Recovery time	t_{rr}	$I_F=I_R=10\text{mA}$ $I_{rr}=0.1I_{IR}, R_L=100\Omega$		5	nS

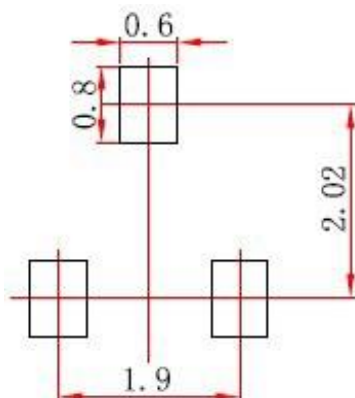
Typical Performance Characteristics ($T_A=25^\circ\text{C}$ unless otherwise Specified)



SOT-23 Package Outline Drawing



Suggested Land Pattern



Note:

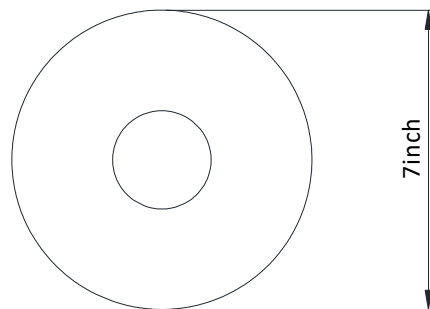
1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.

Ordering Information

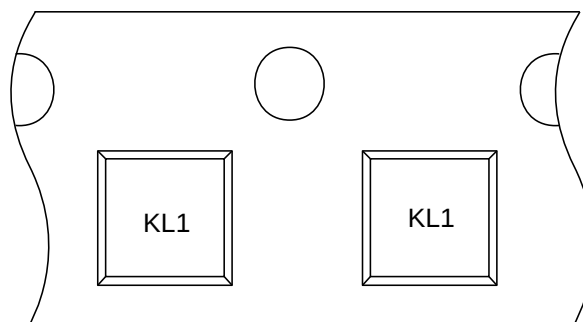
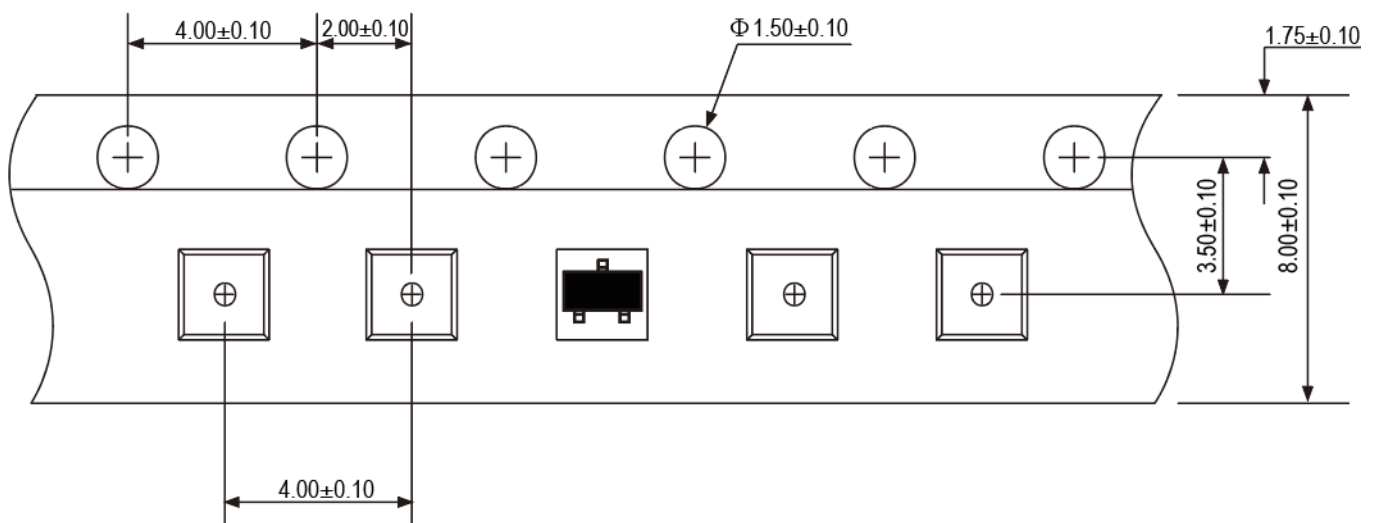
Part Number	Shipping	Reel Size
BAT54	3000/Tape & Reel	7 inch

TAPE AND REEL INFORMATION

Reel Dimensions



Tape Dimensions



User Direction of Feed

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