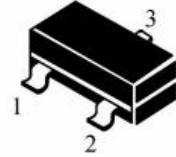




SOT-23 Schottky Barrier Diode 肖特基势垒二极管



Internal Configuration & Device Marking 内部结构与产品打标

Type 型号	BAT54-6AF	BAT54A-6AF	BAT54C-6AF	BAT54S-6AF
Pin 管脚				
Mark 打标	KL1	KL2	KL3	KL4

Absolute Maximum Ratings 最大额定值

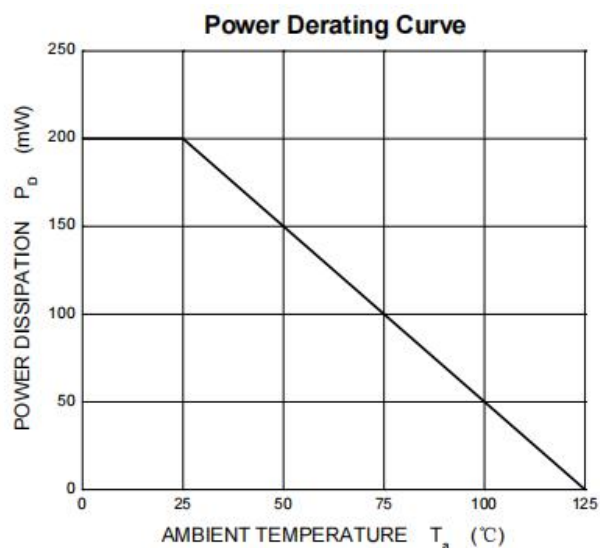
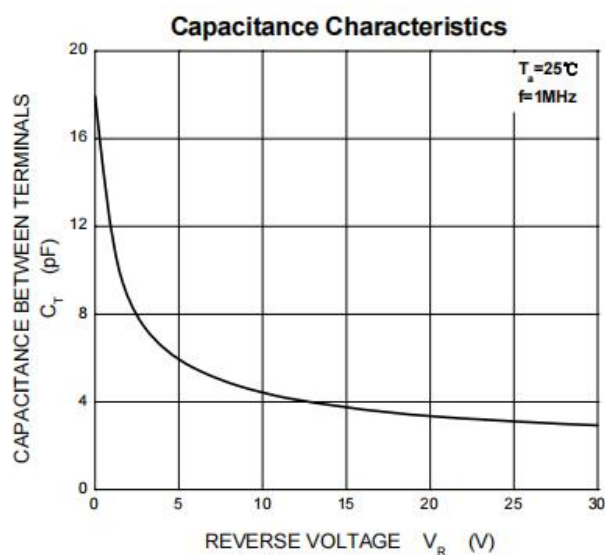
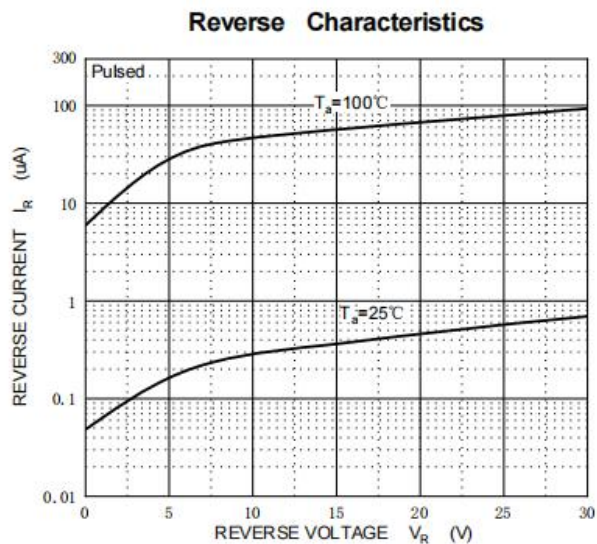
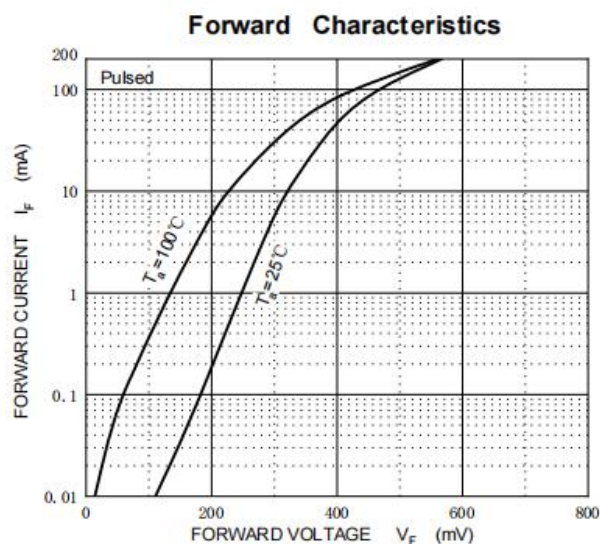
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
Peak Reverse Voltage 反向峰值电压	V_{RRM}	30	V
Reverse Work Voltage 反向工作电压	V_{RWM}		
DC Reverse Voltage 直流反向电压	V_R		
Forward Work Current 正向工作电流	$I_F(I_O)$	100	mA
Peak Forward Current 正向峰值电流	I_{FM}	600	mA
Power dissipation 耗散功率	$P_D(T_a=25^{\circ}C)$	225	mW
Thermal Resistance J-A 结到环境热阻	$R_{\theta JA}$	555	$^{\circ}C/W$
Junction and Storage Temperature 结温和储藏温度	T_J, T_{stg}	-55to+150 $^{\circ}C$	

Electrical Characteristics 电特性

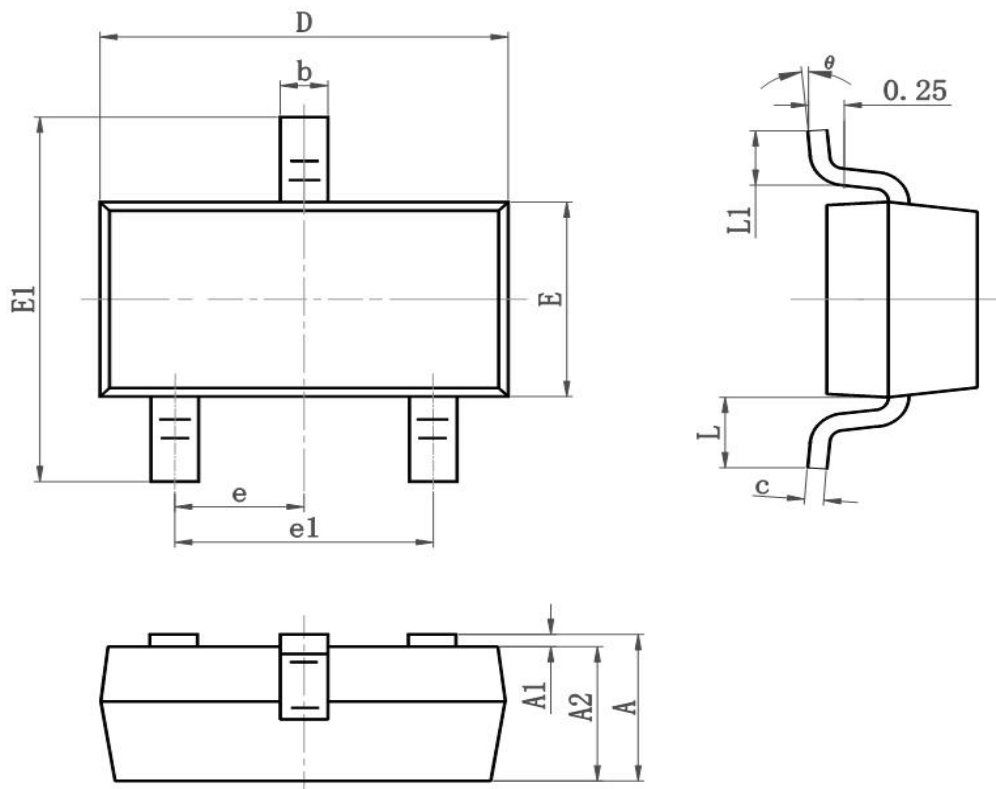
($T_A=25^{\circ}C$ unless otherwise noted 如无特殊说明, 温度为 $25^{\circ}C$)

Characteristic 特性参数	Symbol 符号	Min 最小值	Max 最大值	Unit 单位
Reverse Breakdown Voltage 反向击穿电压($I_R=100\mu A$)	$V_{(BR)}$	30	—	V
Reverse Leakage Current 反向漏电流($V_R=25V$)	I_R	—	2	μA
Forward Voltage($I_F=0.1mA$) 正向电压($I_F=1mA$) ($I_F=10mA$) ($I_F=30mA$) ($I_F=100mA$)	V_F	—	0.24 0.32 0.4 0.5 1	V
Diode Capacitance 二极管电容($V_R=1V, f=1MHz$)	C_D	—	10	pF
Reverse Recovery Time 反向恢复时间	T_{rr}	—	5	nS

■ Typical Characteristic Curve 典型特性曲线



■Dimension 外形封装尺寸



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.050	0.055
E1	2.250	2.550	0.089	0.100
e	0.900	1.00	0.035	0.039
e1	1.800	2.000	0.071	0.079
L	0.500	0.600	0.020	0.024
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°