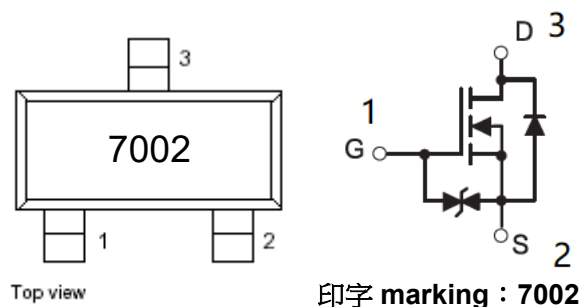


一、产品特性



MAXIMUM RATINGS($T_a=25^\circ\text{C}$) 最大额定值

CHARACTERISTIC 特性参数	Symbol 符号	Rating 额定值	Unit 单位
Drain-Source Voltage 漏极-源极电压	V_{DSS}	60	Vdc
Gate-Source Voltage 栅极-源极电压	V_{GSS}	± 20	Vdc
Drain Current—Continuous 漏极电流-连续	I_D	220	mAdc
Peak Drain Current 峰值漏极电流	I_{DM}	800	mAdc

THERMAL CHARACTERISTICS 热特性

CHARACTERISTIC 特性参数	Symbol 符号	Max 最大值	Unit 单位
Total Device Dissipation FR-5 Board(1) $T_A=25^\circ\text{C}$	PD	200	mW
Total Device Dissipation Alumina Substrate,(2) $T_A=25^\circ\text{C}$ 总耗散功率 氧化铝衬底	P_D	300	mW
Junction and Storage Temperature 结温和储存温度	$T_J,$ T_{stg}	150 , -55 to +150	$^\circ\text{C}$

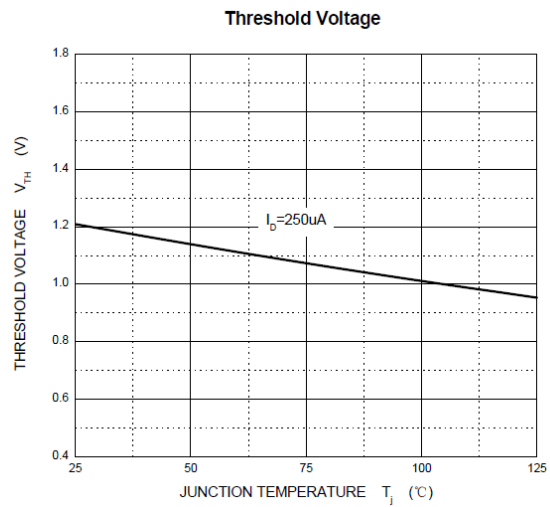
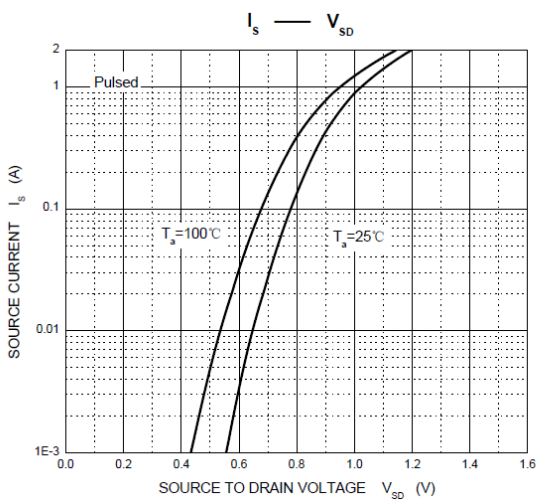
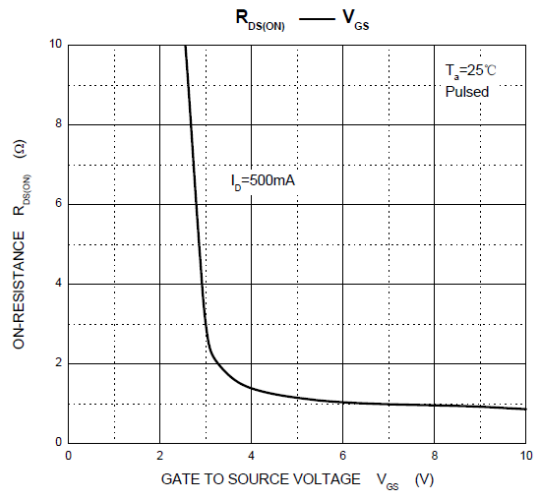
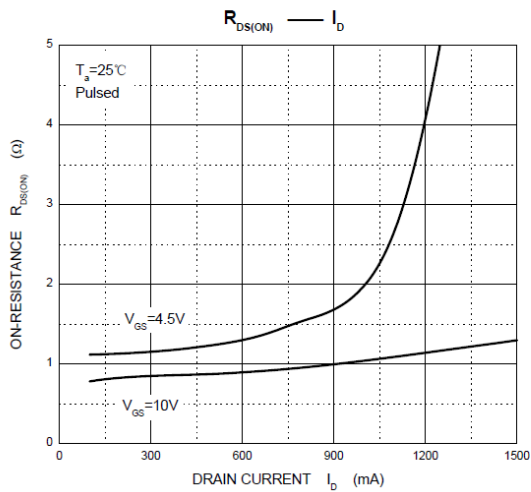
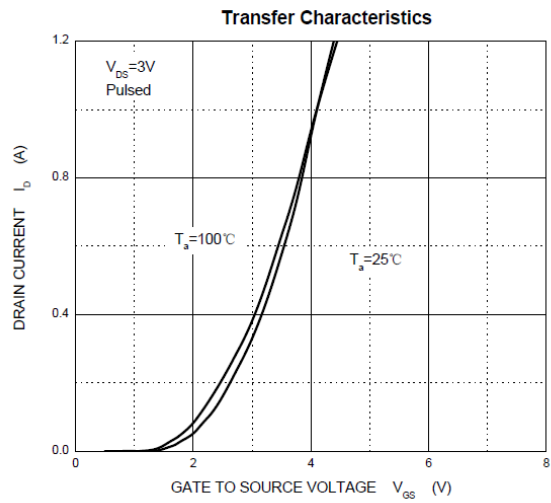
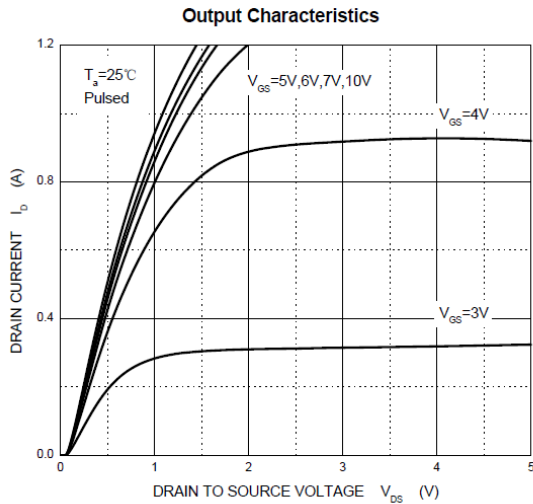
1. FR-5=1.0×0.75×0.062in, printed-circuit board.
2. Alumina=0.4×0.3×0.024in, 99.5%alumina

ELECTRICAL CHARACTERISTICS 电特性

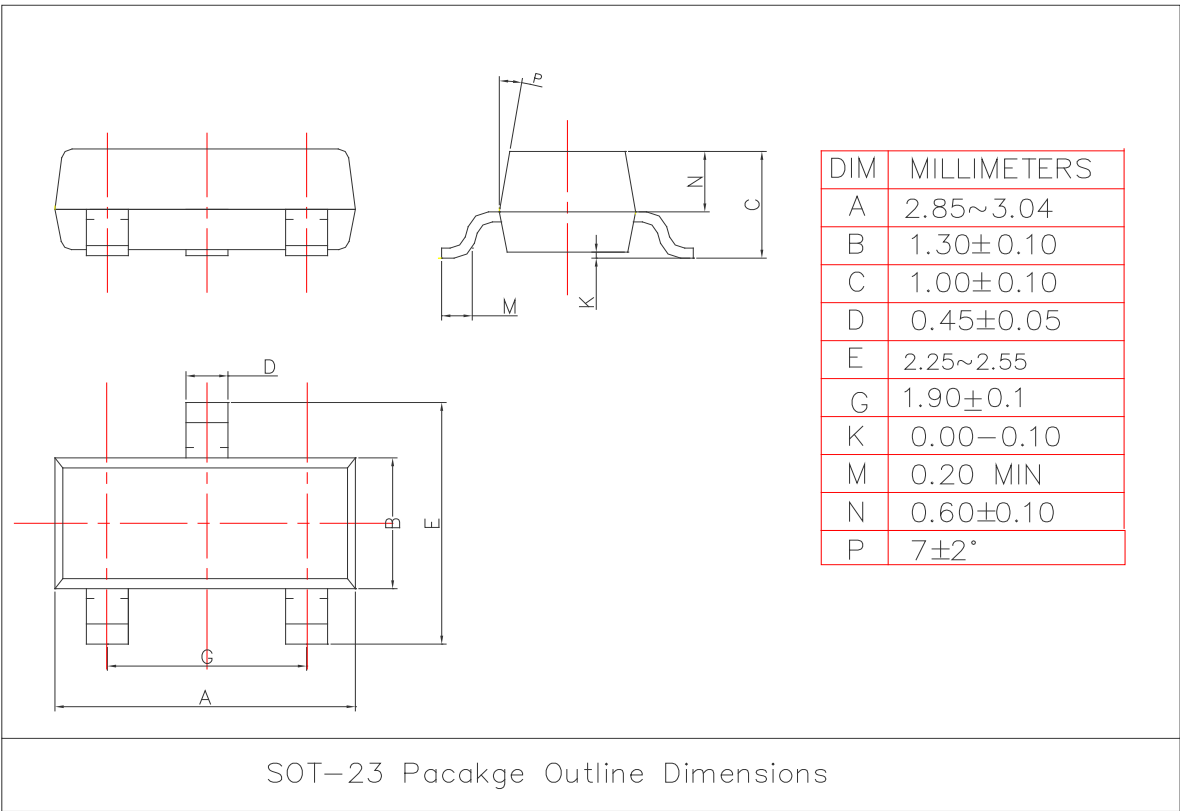
(T_A=25°C unless otherwise noted 如无特殊说明，温度为 25°C)

Characteristic 特性参数	Symbol 符号	Test Condition 测试条件	Min 最小值	TYPE 典型值	Max 最大值	Unit 单位
Drain-Source Breakdown Voltage 漏极-源极击穿电压	V (BR) _{DSS}	V _{GS} =0V, I _D =10μA	60	70	—	V
Zero Gate Voltage Drain Current 零栅电压漏极电流	I _{DSS}	V _{DS} =60V, V _{GS} =0V	—	—	1.0	μA
Gate-Body Leakage Current, Forward 正向栅泄漏电流	I _{GSSF}	V _{GS} =20V, V _{DS} =0V	—	—	10	uA
Gate-Body Leakage Current, Reverse 反向栅泄漏电流	I _{GSSR}	V _{GS} =-20V, V _{DS} =0V	—	—	-10	uA
Gate Threshold Voltage 开启电压	V _{GS(th)}	V _{DS} = V _{GS} , I _D =250μA	1.35	1.6	1.85	V
On-State Drain Current 导通漏极电流	I _{D(on)}	V _{DS} ≥2V _{DS(on)} , V _{GS} =10V	500	—	—	mA
Static Drain-Source On-State Resistance 漏源导通电阻	R _{DS(on)}	V _{GS} =10V, I _D =300mA V _{GS} =4.5V, I _D =200mA	—	2.0 2.5	3 4	Ohm
Forward Transconductance 跨导	g _{fs}	V _{DS} ≥2V _{DS(on)} , I _D =200mA	80	—	—	mS
Diode Forward On-Voltage 正向电压	V _{FSD}	V _{GS} =0V, I _S =115mA	—	—	1.2	V
Turn-On Delay Time	t _{d(on)}	V _{DD} =25V, I _D =500mA, R _G =25Ω, R _L =50Ω, V _{gen} =10V	—	—	10	ns
Turn-Off Delay Time	t _{d(off)}		—	—	15	ns
Input Capacitance 输入电容	C _{iss}	V _{DS} =25V, V _{GS} =0V, f=1MHz	—	—	40	pF
Output Capacitance 输出电容	C _{oss}	V _{DS} =25V, V _{GS} =0V, f=1MHz	—	—	30	pF
Reverse Transfer Capacitance 反馈电容	C _{rss}	V _{DS} =25V, V _{GS} =0V, f=1MHz	—	—	10	pF
Electro-Static discharge 静电释放	ESD	HBM			2000	V

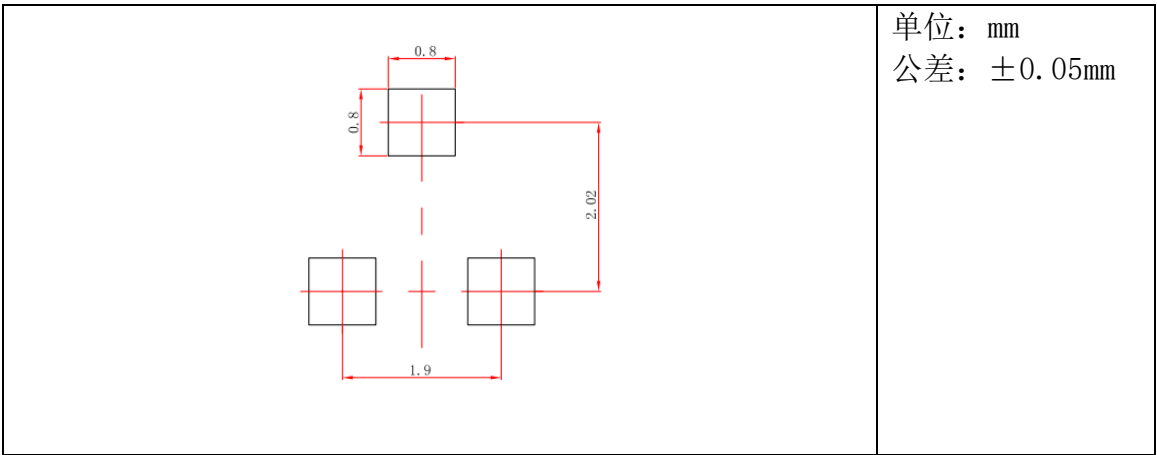
Typical Performance Characteristics



二、SOT-23 外形尺寸 (SOT-23 DIMENSION)



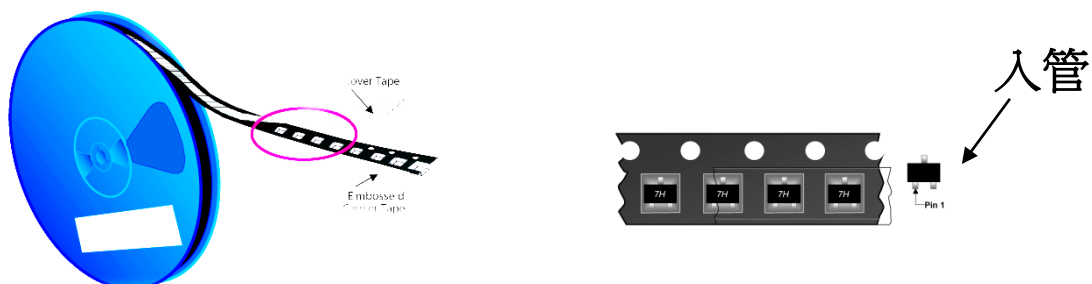
三、焊盘尺寸设计 SOT-23 Suggested Layout



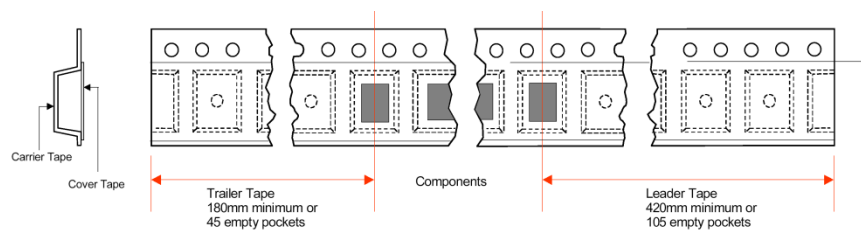
四、包装方式 Packings

封装形式	卷盘尺寸	只/卷	内盒尺寸	卷盘/内盒	只/内盒	外箱尺寸	内盒/外箱	只/外箱
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SOT-23	7"	3000	190X190X135 mm	10	30000	430 X 400 X 215 mm	6	180K
			203X203X195 mm	15	45000	440 X 440 X 230 mm	4	180K



SOT-23 产品编带、包装图



SOT-23 带尾、带头空封数

