

特点/Features :

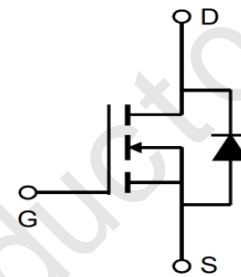
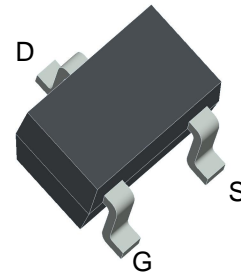
- 1、低导通电阻；
- 2、开关速度快；
- 3、低电压驱动；

用途/Applications :

用于一般开关电路。

印章/MARKING: KN

SOT-23



极限参数/Absolute maximum ratings(Ta=25°C)

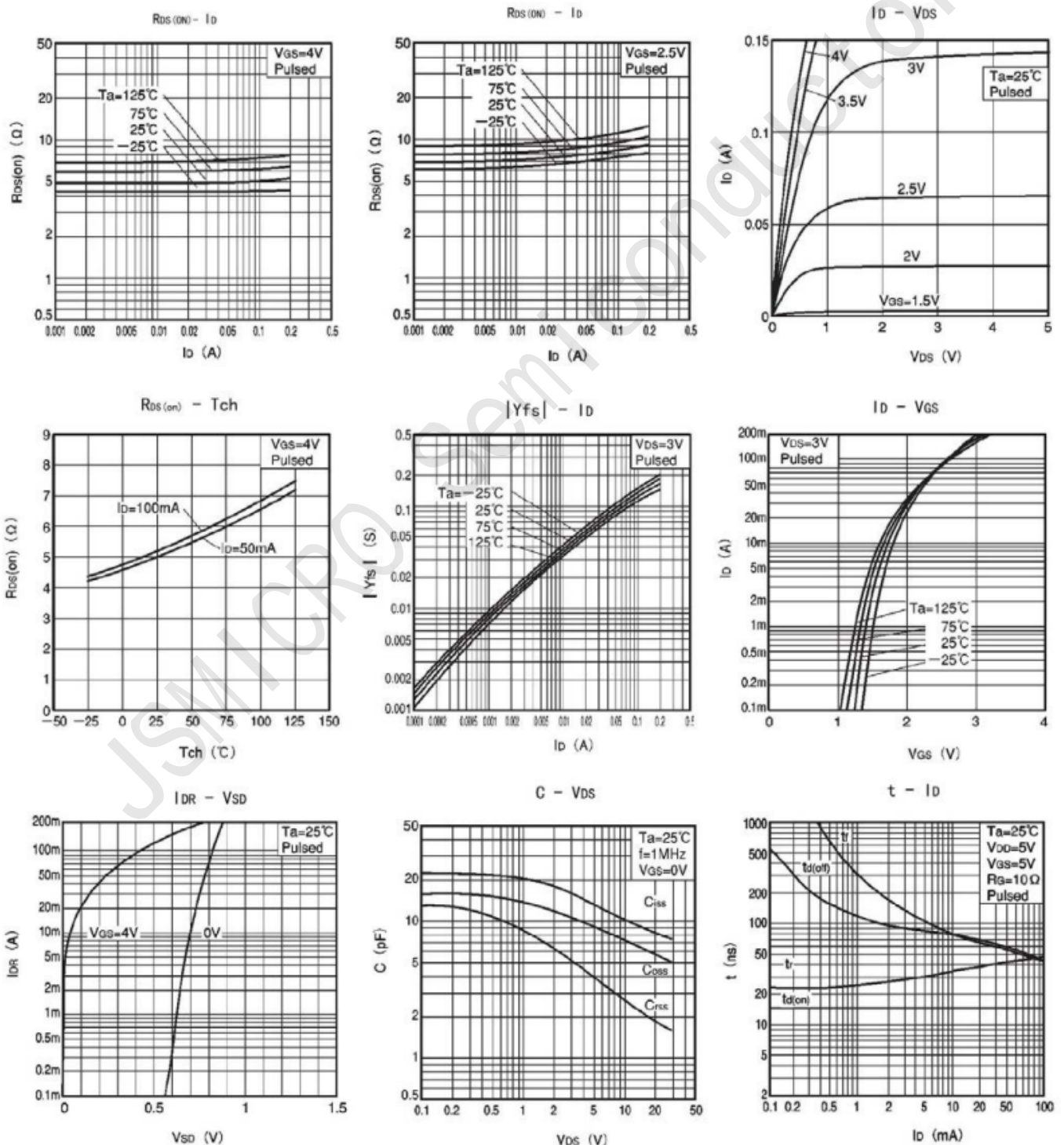
参数/Parameter	符号/ Symbol	数值/Value	单位/Unit
源极-漏极电压/Drain-Source Voltage	V_{DS}	30	V
栅极-源极电压/Gate-Source Voltage	V_{GSS}	± 20	V
漏极电流 (持续) /Continuous Drain Current	I_D	0.1	A
耗散功率/Power Dissipation	P_D	0.35	W
热阻/ Thermal Resistance Junction to Ambient	$R_{\theta JA}$	350	$^{\circ}\text{C}/\text{mW}$
结温/Junction Temperature	T_j	150	$^{\circ}\text{C}$
储存温度/Storage Temperature	T_{stg}	$-55 \sim 150$	$^{\circ}\text{C}$

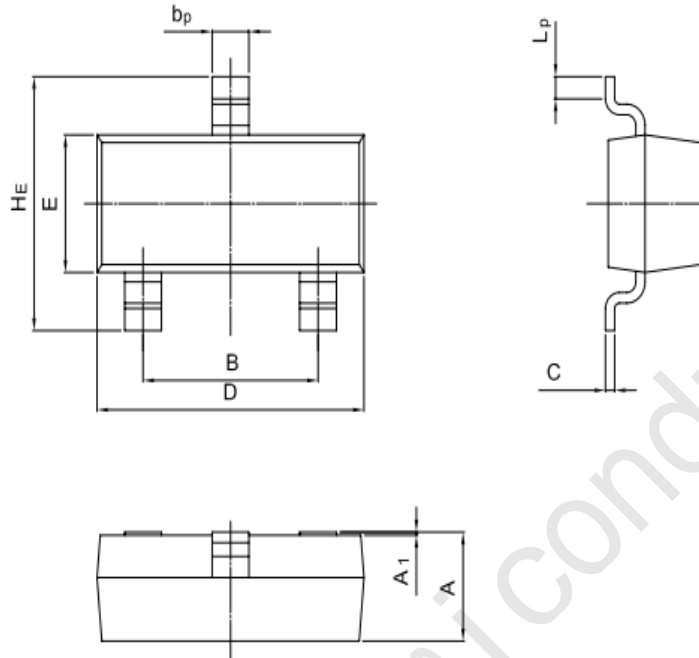
电性能参数/Electrical characteristics (Ta=25°C)

参数	符号	测试条件	最小值	典型值	最大值	单位
源极-漏极击穿电压	$V_{BR(DSS)}$	$V_{GS}=0V, I_D=10 \mu A$	30			V
栅极开启电压	$V_{GS(th)}$	$I_D=100 \mu A, V_{DS}=3V$	0.8		1.5	V
栅极漏电流	I_{GSS}	$V_{GS}=\pm 20V, V_{DS}=0V$			± 500	nA
零栅压漏极电流	I_{DSS}	$V_{GS}=0V, V_{DS}=30V$			0.2	μA
漏极导通电流	$I_{D(ON)}$	$V_{GS}=10V, V_{DS}=7V$	500			mA
漏极源极导通电阻	$R_{DS(ON)}$	$V_{GS}=4V, I_D=10mA$			8	Ω
		$V_{GS}=2.5V, I_D=1mA$			13	
正向跨导	g_{fs}	$V_{DS}=3V, I_D=10mA$	20			ms
漏极-源极导通电压	$V_{DS(ON)}$	$V_{GS}=10V, I_D=500mA$	0.5		3.75	V
		$V_{GS}=5V, I_D=50mA$	0.05		0.375	V
输入电容	C_{iss}	$V_{DS}=5V, V_{GS}=0V, f=1MHz$		13		pF

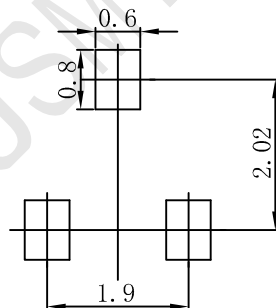
输出电容	C_{oss}			9		
开启时间	$t_{(on)}$	$V_{GS}=5V, V_{DD}=5V, I_D=10mA,$ $R_g=10\Omega, R_L=500\Omega$		15		ns
上升时间	t_r			35		ns
关闭时间	$t_{(off)}$			80		ns
下降时间	t_f			80		ns

典型特性曲线图/Typical Characteristics



SOT-23 Package Outline Dimensions


UNIT	A	B	bp	C	D	E	HE	A1	Lp
mm	1.40 0.95	2.04 1.78	0.50 0.35	0.19 0.08	3.10 2.70	1.65 1.20	3.00 2.20	0.100 0.013	0.50 0.20

SOT-23 Suggested Pad Layout

Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.