



SLS SEMICONDUCTOR (SHENZHEN) CO.,LTD.

SOT-23 封装半导体场效应管/SOT-23 Plastic-Encapsulate MOSFETS

SLS3401 (P-Channel Enhancement mode Field Effect Transistor)

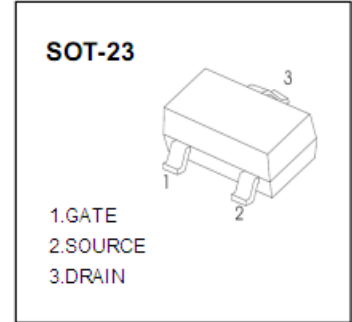
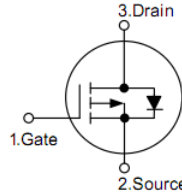
印章/MARKING: A19T

特点/Features :

- 1、 电流能力强 ;
- 2、 导通电阻低 ;

用途/Applications :

用于一般开关和低压电源电路。



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

参数/Parameter	符号/ Symbol	数值/Value	单位/Unit
漏极-源极电压/Drain-Source Voltage	V_{DS}	-30	V
栅极-源极电压/Gate-Source Voltage	V_{GS}	±12	V
漏极电流 (持续) /Continuous Drain Current	I_D	-4.2	A
耗散功率/Power Dissipation	P_D	0.35	W
热阻/ Thermal Resistance Junction to Ambient	$R_{\theta JA}$	350	°C/mW
结温/Junction Temperature	T_j	150	°C
储存温度/Storage Temperature	T_{stg}	-55~150	°C



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参数	符号	测试条件	最小值	典型值	最大值	单位
静态/Static Characteristics						
源极-漏极击穿电压	$V_{BR(DSS)}$	$V_{GS}=0V, I_D=-250 \mu A$	-30			V
栅极开启电压	$V_{GS(th)}$	$I_D=-250 \mu A, V_{GS}=V_{DS}$	-0.7		-1.3	V
栅极漏电流	I_{GSS}	$V_{GS}=\pm 12V, V_{DS}=0V$			± 100	nA
零栅压漏极电流	I_{DSS}	$V_{GS}=0V, V_{DS}=-24V$			-1	μA
漏极源极导通电阻	$R_{DS(ON)}$	$V_{GS}=-10V, I_D=-4.2A$			65	m Ω
		$V_{GS}=-4.5V, I_D=-4A$			75	
		$V_{GS}=-2.5V, I_D=-1A$			90	
正向跨导 ^①	g_{fs}	$V_{DS}=-5V, I_D=-5A$	7			S
动态/Dynamic Characteristics						
输入电容 ^②	C_{iss}	$V_{DS}=-15V, V_{GS}=0V, f=1MHz$		954		pF
输出电容 ^②	C_{oss}			115		
反向传输电容 ^②	C_{rss}			77		
开关参数/Switching Characteristics						
总栅极充电电荷	Q_G	$V_{DS}=-6V, V_{GS}=-4.5V,$ $I_D=-2.8A$		5.4	10	nC
栅极-源极充电电荷	Q_{GS}			0.8		nC
栅极-漏极充电电荷	Q_{GD}			1.1		nC
开启延时 ^②	$t_{d(on)}$	$V_{DD}=-10V, V_{GEN}=-15V,$ $R_{GEN}=6 \Omega, R_L=3.6 \Omega$			6.3	ns
上升时间 ^②	t_r				3.2	ns
关闭延时 ^②	$t_{d(off)}$				38.2	ns
下降延时 ^②	t_f				12	ns
漏极-源极二极管参数/Drain-source Body Diode Characteristics						
二极管正向压降 ^①	V_{SD}	$I_S=-1A, V_{GS}=0V$			-1	V

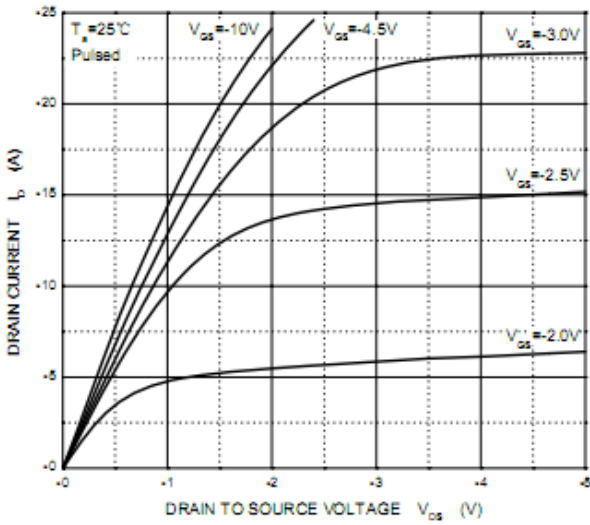
注：① 脉冲测试脉冲宽度 $\leq 300\mu S$, 占空比 $\leq 2\%$;

② 这些参数未通过验证;

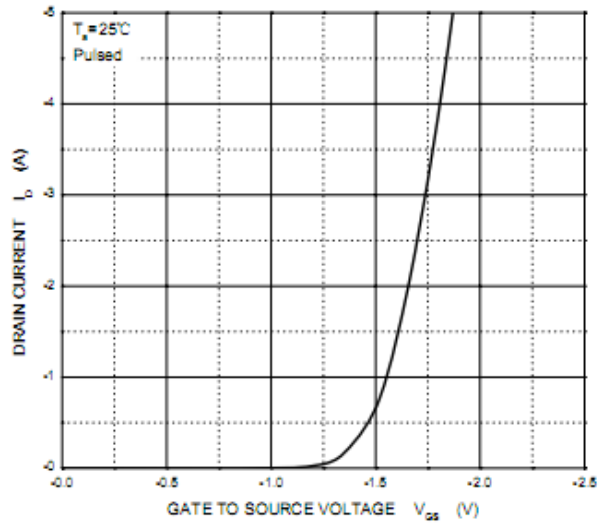


典型特性曲线图/Typical Characteristics

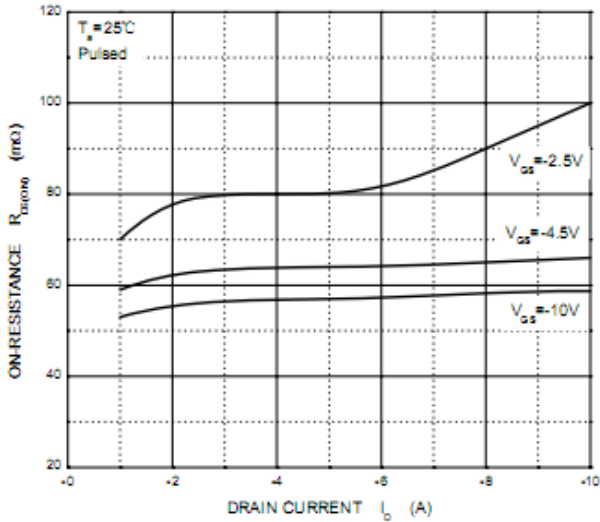
Output Characteristics



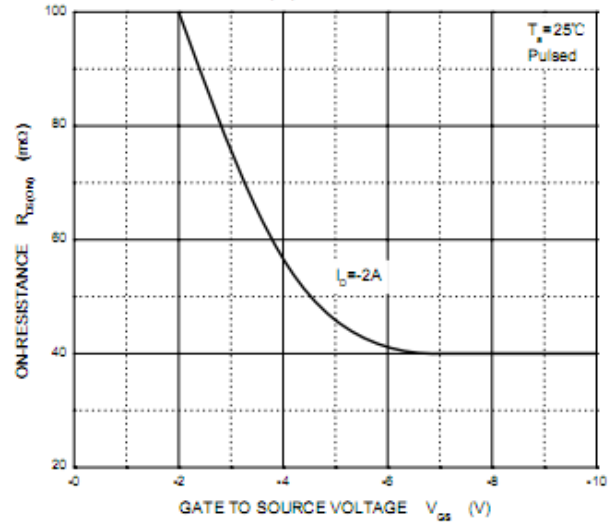
Transfer Characteristics



$R_{DS(ON)}$ — I_D



$R_{DS(ON)}$ — V_{GS}



I_S — V_{SD}

