



## 型号/TYPE: SLS4606A

The SLS4606A uses advanced trench technology to provide excellent RDS(ON) and low gate charge . The complementary MOSFETs may be used to form a level shifted high side switch, and for a host of other applications.

SLS4606A采用先进的沟槽技术，提供卓越的无线电数据系统（ON）和低栅电荷。互补mosfet可用于形成电平移位的高压侧开关，以及用于许多其它应用。

## 主要特性/Features

先进的沟槽工艺技术 Advanced trench process technology

高密度单元设计，超低导通电阻 High density cell design for ultra low on-resistance

高功率和电流处理能力 High power and current handling capability

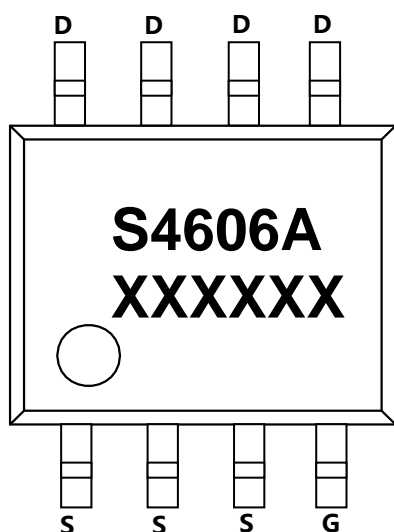
适用于锂电池组应用 Ideal for Liion battery pack applications

N+P Channel Power MOSFET N+P沟道功率mosfet

## 应用/Application

消费电子产品 Consumer electronics

## 印字/MARKING 引脚定义/pin definition





### N沟道极限参数/N-Channel Absolute maximum ratings(Ta=25°C)

参数Parameter	符号Symbol	数值Value	单位Unit
Drain-Source Voltage	$V_{DS}$	30	V
Gate-Source Voltage	$V_{GS}$	$\pm 20$	V
Continuous Drain Current	$I_D$	5.0	A
Pulsed Drain Current (note1)	$I_{DM}$	20	A
Power Dissipation	$P_D (T_a=25^\circ C)$	1.15	W
Thermal Resistance Junction to Ambient(note2)	$R_{\theta JA}$	100	$^\circ C/mW$
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature	$T_{stg}$	-55 ~ 150	$^\circ C$

### N沟道电性能参数/ P-Channel Electrical characteristics (Ta=25°C)

参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
<b>静态参数/Static Characteristics</b>						
Drain-Source Breakdown Voltage	$V_{BR(DSS)}$	$V_{GS}=0V, I_D=250\mu A$	30			V
Gate Threshold Voltage(note3)	$V_{GS(th)}$	$I_D=250\mu A, V_{GS}=V_{DS}$	1		3	V
Gate-body leakage current	$I_{GSS}$	$V_{GS}=\pm 20V, V_{DS}=0V$			$\pm 100$	nA
Zero gate voltage drain current	$I_{DSS}$	$V_{DS}=24V, V_{GS}=0V$			1	$\mu A$
Drain-source on-resistance(note3)	$R_{DS(ON)}$	$V_{GS}=10V, I_D=5A$			32	m $\Omega$
		$V_{GS}=4.5V, I_D=4A$			40	
Drain-Source Diode Forward Voltage(note3)	$V_{SD}$	$V_{GS}=0V, I_{SD}=3A$	0.5		1.2	V
<b>动态参数/Dynamic Characteristics(note4)</b>						
Input Capacitance	$C_{iss}$	$V_{DS}=10V, V_{GS}=0V,$ $f=1MHz$		620		pF
Output Capacitance	$C_{oss}$			150		
Reverse Transfer Capacitance	$C_{rss}$			80		
<b>开关参数/Switching Characteristics(note4)</b>						
Turn-on delay time	$t_{d(on)}$	$V_{DD}=15V, I_{DS}=1A,$ $V_{GEN}=4.5V, R_L=15\Omega,$ $R_{GEN}=6\Omega,$			35	ns
Turn-on rise time	$t_r$				55	ns
Turn-off delay time	$t_{d(off)}$				75	ns
Turn-off fall time	$t_f$				30	ns



**P沟道极限参数/P-Channel Absolute maximum ratings(Ta=25°C)**

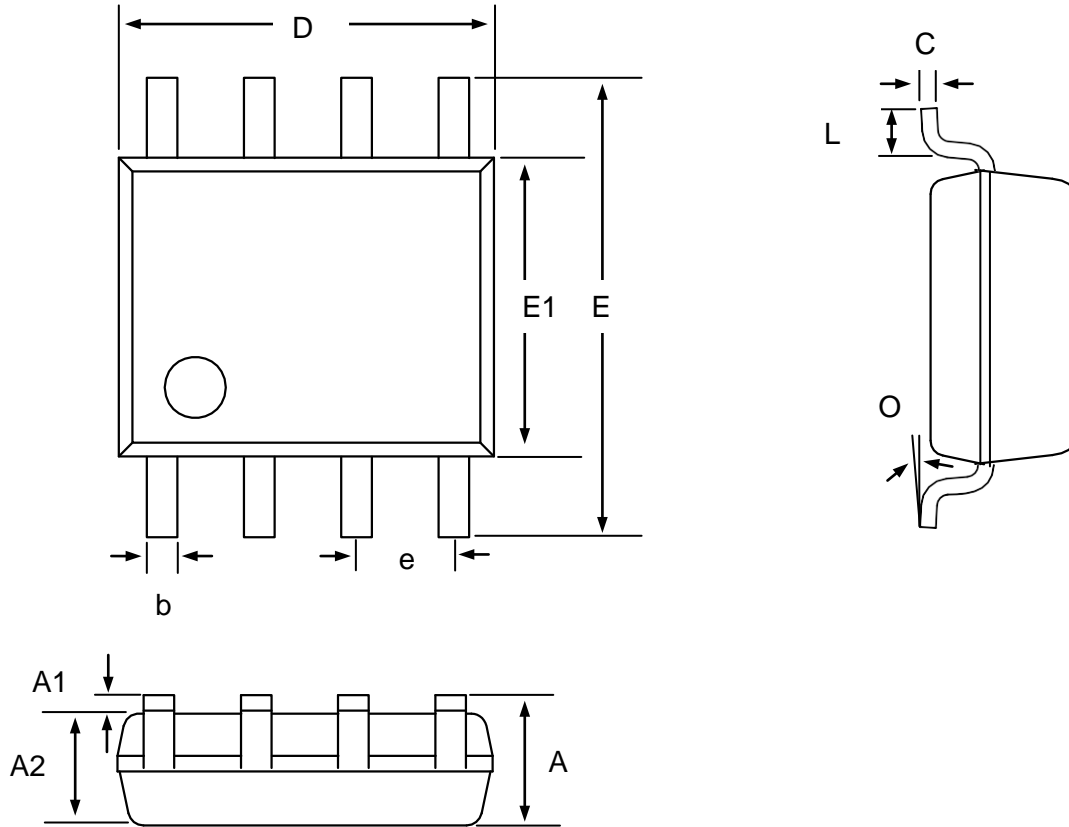
参数Parameter	符号Symbol	数值Value	单位Unit
Drain-Source Voltage	$V_{DS}$	-30	V
Gate-Source Voltage	$V_{GS}$	$\pm 20$	V
Continuous Drain Current	$I_D$	-5.0	A
Pulsed Drain Current (note1)	$I_{DM}$	-20	A
Power Dissipation	$P_D$ (Ta=25°C)	1.15	W
Thermal Resistance Junction to Ambient(note2)	$R_{\theta JA}$	100	°C/mW
Junction Temperature	$T_j$	150	°C
Storage Temperature	$T_{stg}$	-55 ~ 150	°C

**P沟道电性能参数/ P-Channel Electrical characteristics (Ta=25°C)**

参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
<b>静态参数/Static Characteristics</b>						
Drain-Source Breakdown Voltage	$V_{BR(DSS)}$	$V_{GS}=0V, I_D=-250\mu A$	-30			V
Gate Threshold Voltage(note3)	$V_{GS(th)}$	$I_D=250\mu A, V_{GS}=V_{DS}$	-1		-3	V
Gate-body leakage current	$I_{GSS}$	$V_{GS}=\pm 20V, V_{DS}=0V$			$\pm 100$	nA
Zero gate voltage drain current	$I_{DSS}$	$V_{DS}=-24V, V_{GS}=0V$			-1	$\mu A$
Drain-source on-resistance(note3)	$R_{DS(ON)}$	$V_{GS}=-10V, I_D=-5A$			55	m $\Omega$
		$V_{GS}=-4.5V, I_D=-4A$			90	
Drain-Source Diode Forward Voltage(note3)	$V_{SD}$	$V_{GS}=0V, I_{SD}=-3A$	-0.5		-1.2	V
<b>动态参数/Dynamic Characteristics(note4)</b>						
Input Capacitance	$C_{iss}$	$V_{DS}=-10V, V_{GS}=0V,$ $f=1MHz$		620		pF
Output Capacitance	$C_{oss}$			150		
Reverse Transfer Capacitance	$C_{rss}$			80		
<b>开关参数/Switching Characteristics(note4)</b>						
Turn-on delay time	$t_{d(on)}$	$V_{DD}=-15V, I_{DS}=-1A,$ $V_{GEN}=-4.5V, R_L=15\Omega,$ $R_{GEN}=6\Omega,$			35	ns
Turn-on rise time	$t_r$				55	ns
Turn-off delay time	$t_{d(off)}$				75	ns
Turn-off fall time	$t_f$				30	ns



封装外观尺寸/SOP8 Package Information



Symbol	Dim in mm		
	Min	Nor	Max
A	1.350	1.550	1.750
A1	0.100	0.175	0.250
A2	1.350	1.450	1.550
b	0.330	0.420	0.510
c	0.170	0.210	0.250
D	4.800	4.900	5.000
e	1.270(BSC)		
E	3.800	3.900	4.000
E1	0.400	0.835	1.2700
L	0°	4°	8°