



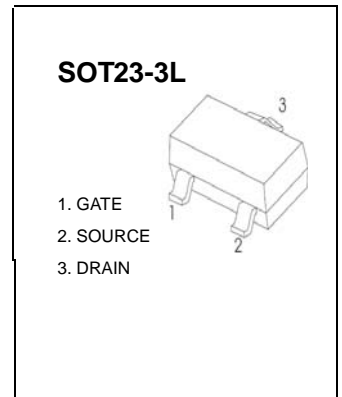
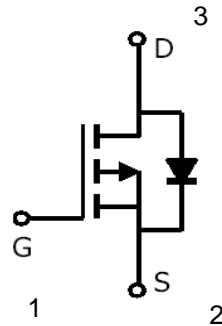
P-CHANNEL MOSFET/P 沟道 MOS 晶体管

用途：适用于作负载开关或脉宽调制应用。

Purpose: This device is suitable for use as a load switch or in PWM applications.

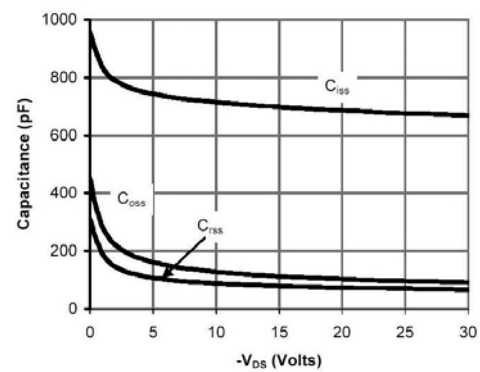
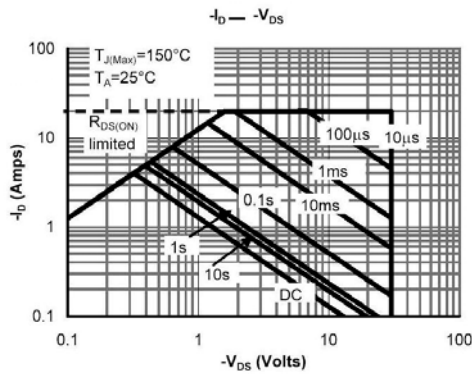
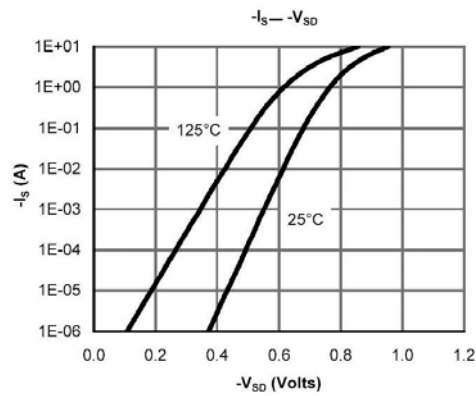
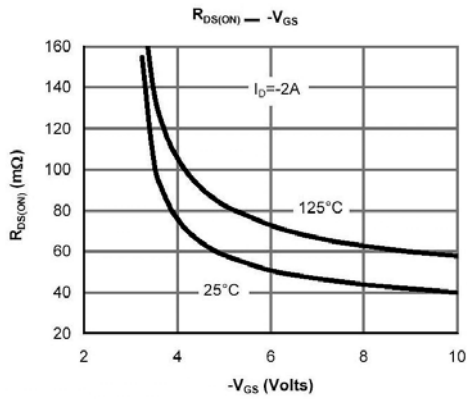
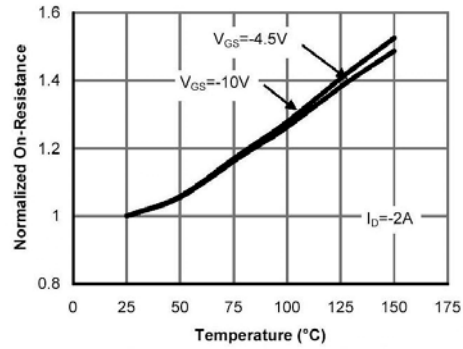
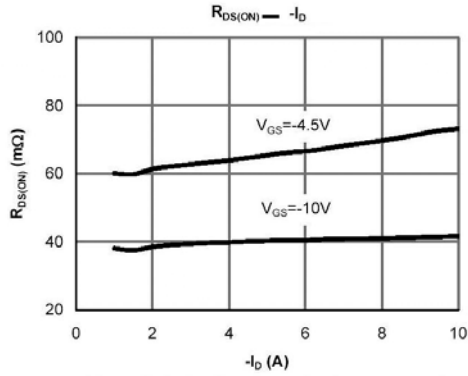
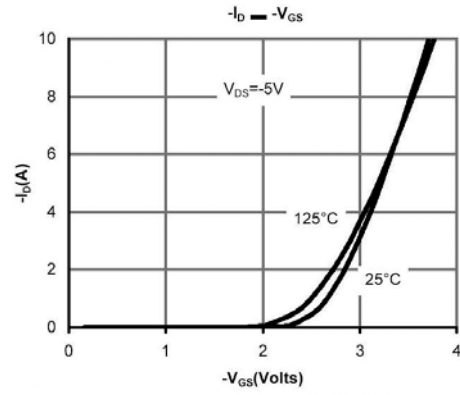
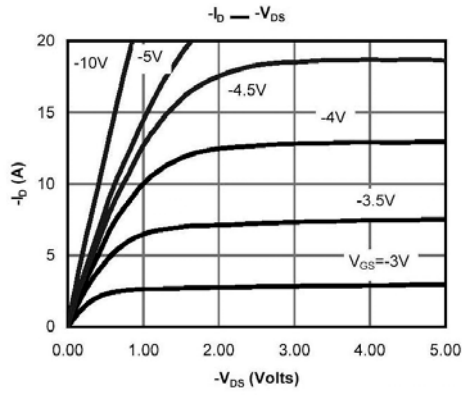
极限参数/Absolute maximum ratings ($T_a=25^\circ\text{C}$)

参数符号 Symbol	数值 Rating	单位 Unit
V_{DS}	-30	V
$I_D (T_a=25^\circ\text{C})$	-4.1	A
$I_D (T_a=70^\circ\text{C})$	-3.5	A
I_{DM}	-20	A
V_{GS}	± 20	V
$P_D (T_a=25^\circ\text{C})$	1.4	W
$P_D (T_a=70^\circ\text{C})$	1	W
T_J, T_{STG}	-55 to 150	$^\circ\text{C}$



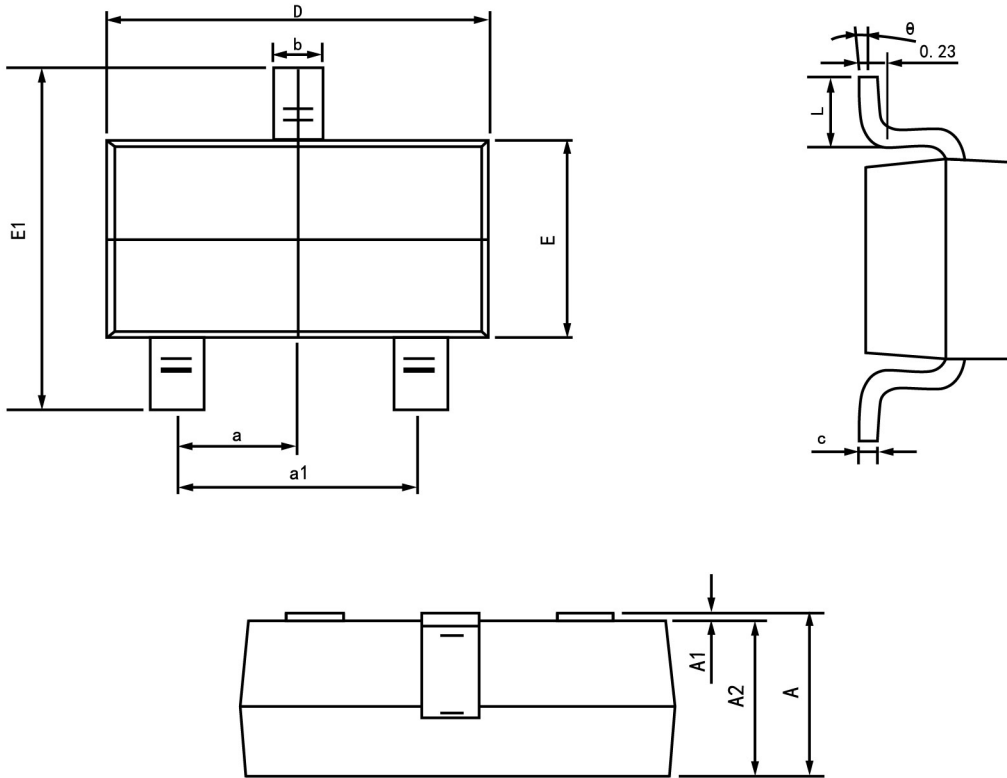
电性能参数/Electrical Characteristics ($T_J=25^\circ\text{C}$)

参数符号 Symbol	测试条件 Test Conditions		最小值 Min	典型值 Typ	最大值 Max	单位 Unit	
BV_{DSS}	$V_{GS}=0V$	$I_D=-250\ \mu A$	-30			V	
I_{DSS}	$V_{DS}=-24V$	$V_{GS}=0V$			-1	μA	
	$V_{DS}=-24V$	$V_{GS}=0V$			-5	μA	
I_{GSS}	$V_{GS}=\pm 20V$	$V_{DS}=0V$			± 0.1	μA	
$I_{D(on)}$	$V_{GS}=-4.5V$	$V_{DS}=-5V$	-10			A	
$V_{GS(th)}$	$V_{DS}=V_{GS}$	$I_D=-250\ \mu A$	-1	-1.8	-3	V	
$R_{DS(on)(1)}$	$V_{GS}=-10V$	$I_D=-4.1A$		40.5	52	$m\ \Omega$	
$R_{DS(on)(2)}$	$V_{GS}=-10V$	$I_D=-4.1A$		57	73	$m\ \Omega$	
$R_{DS(on)(3)}$	$V_{GS}=-4.5V$	$I_D=-3A$		64	87	$m\ \Omega$	
g_{FS}	$V_{DS}=-5V$	$I_D=-4A$	5.5	8.2		S	
V_{SD}	$V_{GS}=0V$	$I_S=-1A$		-0.77	-1	V	
C_{iss}	$V_{DS}=-15V$	$V_{GS}=0V$	$f=1MHz$		700	pF	
C_{oss}					120	pF	
C_{rSS}					75	pF	
$t_{d(on)}$	$V_{GS}=-10V$	$V_{DS}=-15V$	$R_L=3.6\ \Omega$	$R_{GEN}=3\ \Omega$		8.6	ns
t_r						5	ns
$t_{d(off)}$						28.2	ns
t_f						13.5	ns





SOT-23-3L Package Outline Dimensions



Symbol	Dimension in Millimeters	
	Min	Max
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.300	0.500
c	0.100	0.200
D	2.820	3.020
E	1.500	1.700
E1	2.650	2.950
e	0.950 (Basic)	
e1	1.800	2.000
L	0.300	0.600
θ	0°	8°