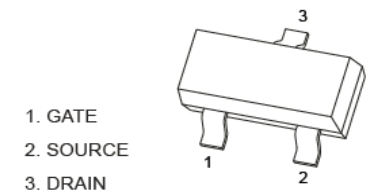


V(BR)DSS	RDS(ON)MAX	ID
60V	2.7Ω@10V	340mA
	3.0Ω@4.5V	

SOT-23



Equivalent circuit

MARKING



特征 Features

- High density cell design for low $R_{DS(ON)}$.
- Voltage controlled small signal switch.
- Rugged and reliable.
- High saturation current capability.
- ESD protected
- Load Switch for Portable Devices.
- DC/DC Converter.

机械数据 Mechanical Data

- 封装: SOT-23 封装 SOT-23 Small Outline Plastic Package.
- 环氧树脂 UL 易燃等级 Epoxy UL: 94V-0.
- 安装位置: 任意 Mounting Position: Any.

极限值和温度特性($T_A = 25^\circ\text{C}$ 除非另有规定)

Maximum Ratings & Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

参数 Parameters	符号 Symbol	数值 Value	单位 Unit
Drain-Source Voltage	V_{DS}	60	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current	I_D	340	mA
Power Dissipation	P_D	350	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-50-+150	$^\circ\text{C}$
Thermal Resistance From Junction to Ambient	$R_{\theta JA}$	357	$^\circ\text{C/W}$

电特性 ($T_A = 25^\circ\text{C}$ 除非另有规定)

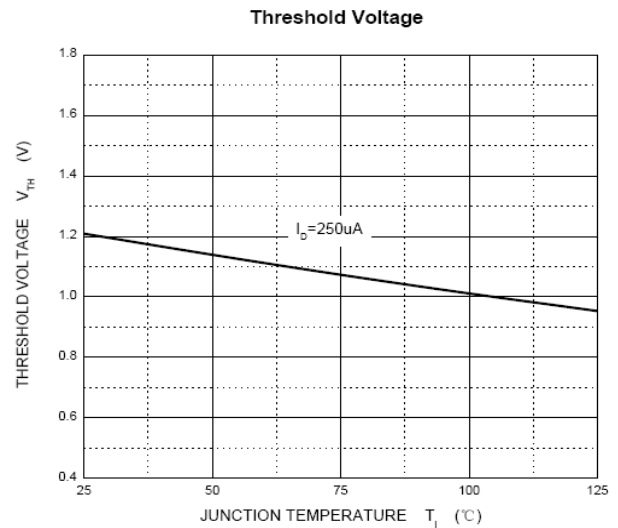
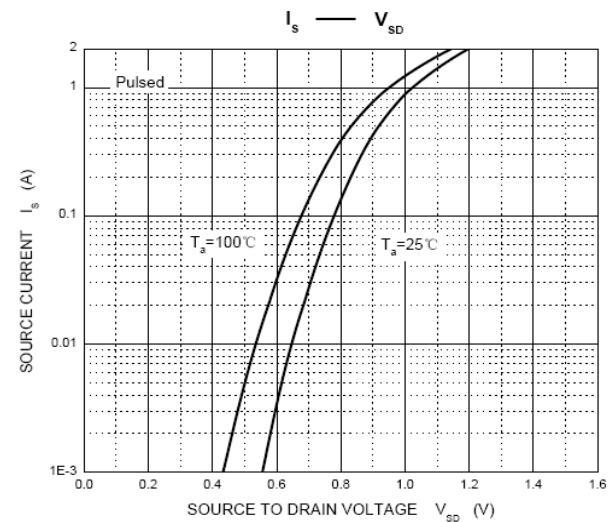
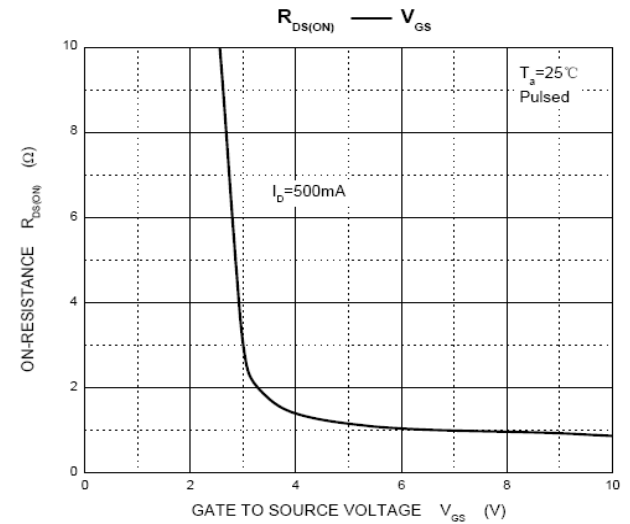
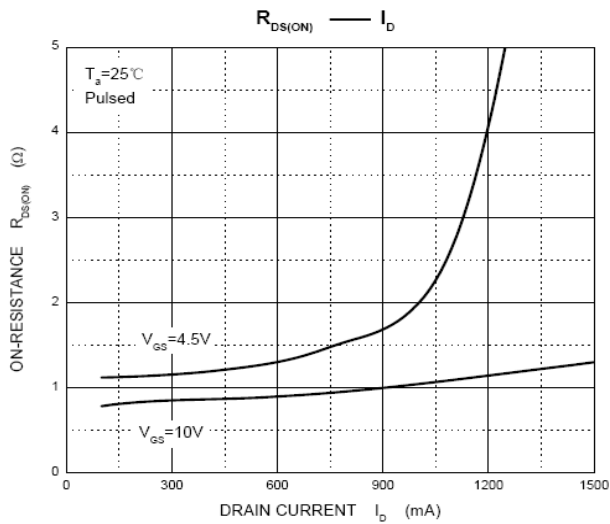
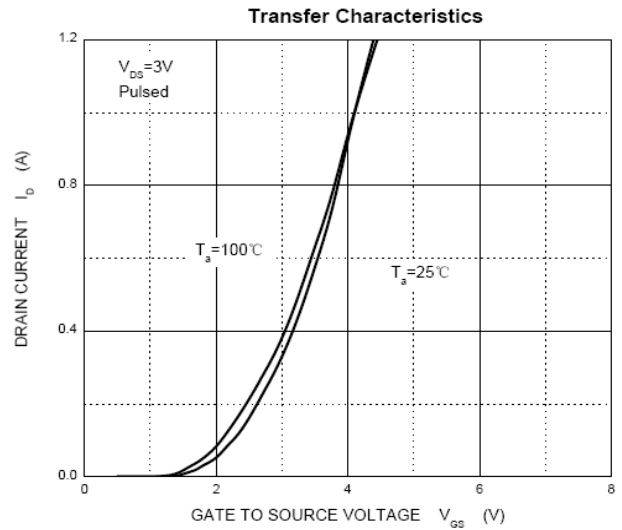
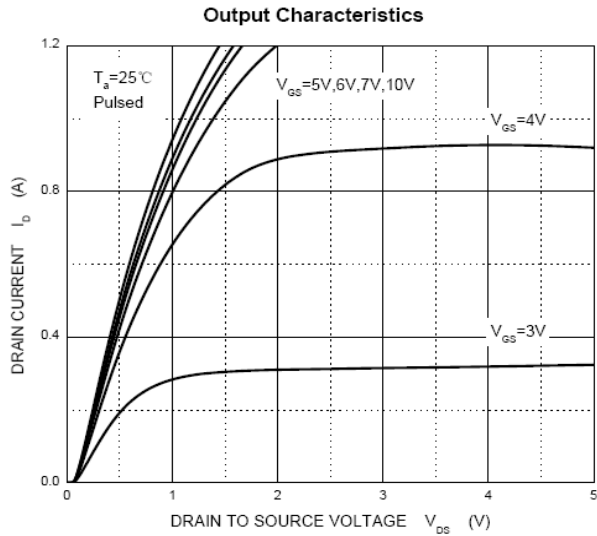
Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified).

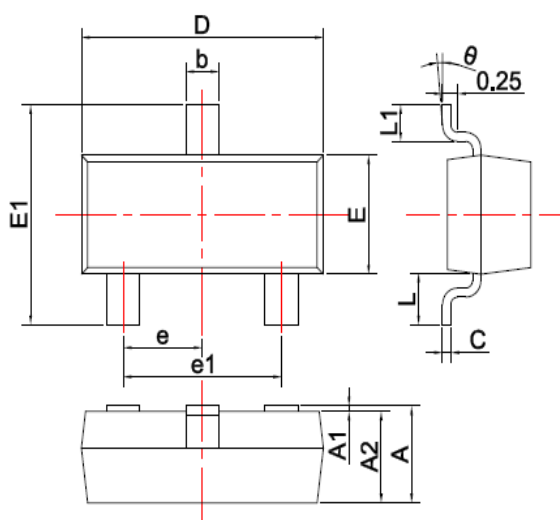
参数 Parameter	符号 Symbols	测试条件 Test Condition	界限 Limits			单位 Unit
			Min	Typ	Max	
Drain-Source Breakdown Voltage	VDS	VGS=0V, ID=250uA	60			V
Gate-Threshold voltage*	Vth(GS)	VDS=VGS, ID=1mA	1	1.3	2.5	V
Gate-body Leakage	IGSS1	VDS=0V, VGS=±20V			±10	uA
	IGSS	VDS=0V, VGS=±10V			±200	nA
	IGSS	VDS=0V, VGS=±5V			±100	nA
Zero Gate Voltage Drain current	IDSS	VDS=48V, VGS=0V			1	uA
Drain-Source On-Resistance*	RDS(ON)	VGS=10V, ID=500mA		0.9	2.7	Ω
		VGS=4.5V, IC=200mA		1.1	3.0	
Diode Forward voltage	VSD	IS=300mA, VGS=0V			1.50	V
Input capacitance**	Ciss	VDS=10V, VGS=0V,f=1MHz			40	pF
Output capacitance**	Coss				30	
Reverse Transfer capacitance**	Crss				10	
SWITCHING TIME						
Turn-on Time**	td(on)	VDD=50V, RL=250Ω, VGS=10V, RGS=50Ω, RG=50Ω			10	ns
Turn-off Time**	td(off)				15	
Reverse recovery Time	trr	VGS=0V, IS=300mA, VR=25V, Dis/dt=-100a/uS		30		ns
GATE-SOURCE ZENER DIODE						
Gate-Source Breakdown Voltage	BVGso	Igs=±1mA(Open Drain)	±21.5		±32	V

Notes: * Pulse Test: Pulse Width $\leq 300\mu s$, Duty Cycle $\leq 2\%$.

** These parameters have on way to verify.

Typical characteristics



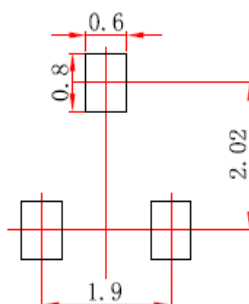
SOT-23 PACKAGE OUTLINE Plastic surface mounted package


SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
θ	0°	8°

Unit: mm

焊盘设计参考Precautions: PCB Design

Recommended land dimensions for SOT-23 diode. Electrode patterns for PCBs


Note:

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

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