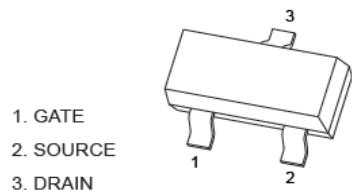
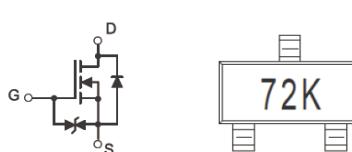


V(BR)DSS	RDS(ON)MAX	ID
60V	2.7Ω@10V	
	3.0Ω@4.5V	340mA

SOT-23


Equivalent circuit



MARKING

72K

特征 Features

- High density cell design for low RDS(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(TA = 25°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	°C
Storage Temperature	T _{stg}	-50~+150	°C
Thermal Resistance From Junction to Ambient	R _{θJA}	357	°C/W

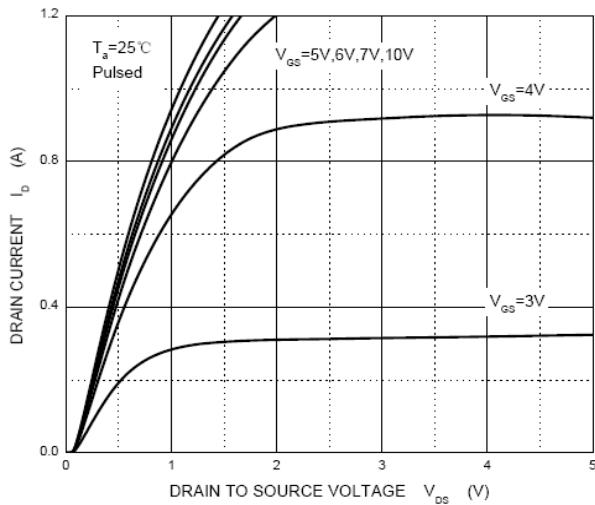
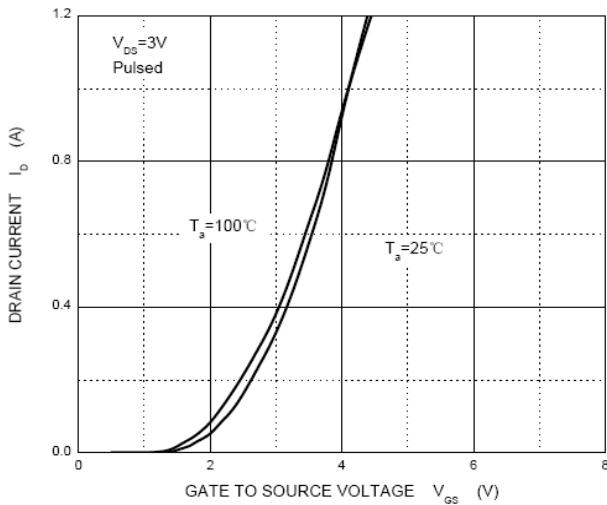
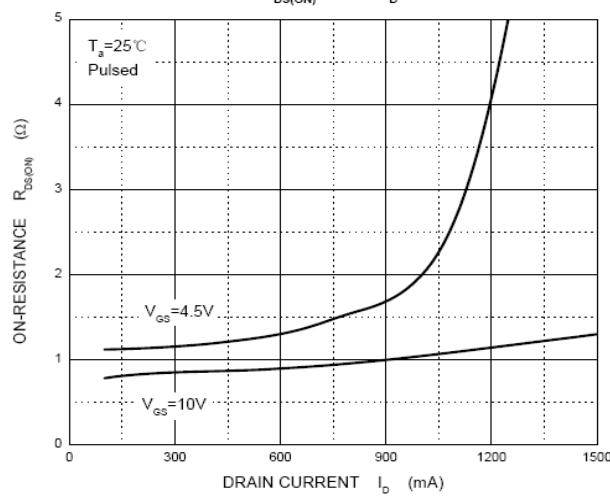
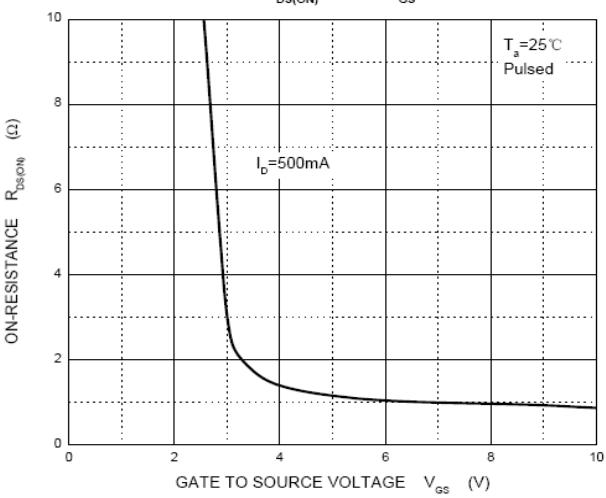
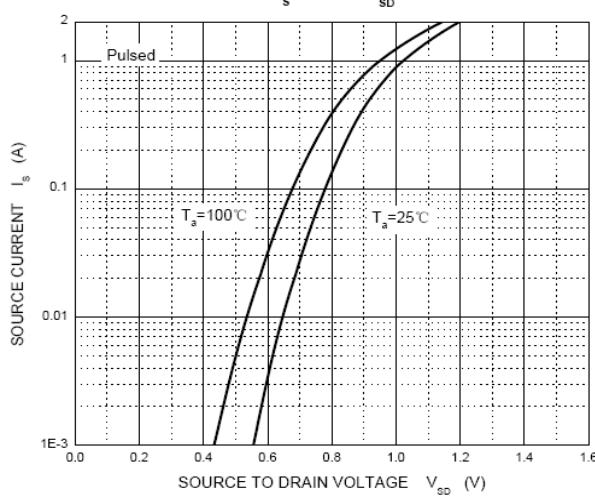
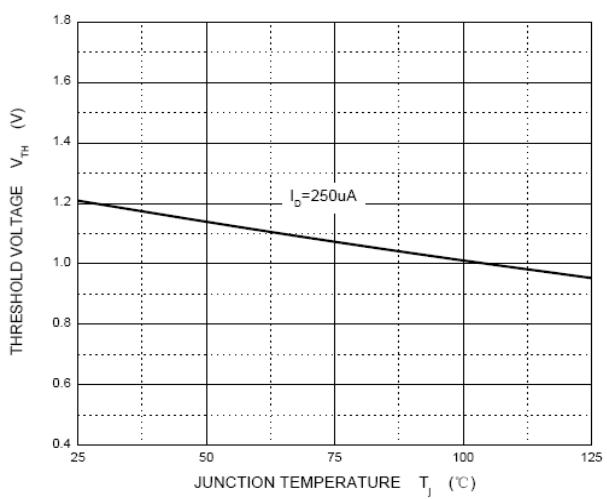
电特性 (TA = 25°C 除非另有规定)

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

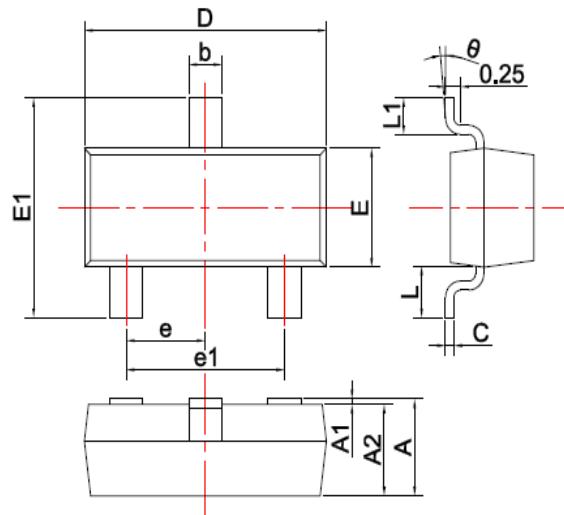
参数 Parameter	符号 Symbols	测试条件 Test Condition	界限 Limits			单位 Unit
			Min	Typ	Max	
Drain-Source Breakdown Voltage	V _{DS}	V _{Gs} =0V, I _D =250μA	60			V
Gate-Threshold voltage*	V _{th(GS)}	V _{DS} =V _{Gs} , I _D =1mA	1	1.3	2.5	V
Gate-body Leakage	I _{GSS1}	V _{DS} =0V, V _{Gs} =±20V			±10	uA
	I _{GSS}	V _{DS} =0V, V _{Gs} =±10V			±200	nA
	I _{GSS}	V _{DS} =0V, V _{Gs} =±5V			±100	nA
Zero Gate Voltage Drain current	I _{DSS}	V _{DS} =48V, V _{Gs} =0V			1	uA
Drain-Source On-Resistance*	R _{D(S)}	V _{Gs} =10V, I _D =500mA		0.9	2.7	Ω
		V _{Gs} =4.5V, I _D =200mA		1.1	3.0	
Diode Forward voltage	V _{SD}	I _S =300mA, V _{Gs} =0V			1.50	V
Input capacitance**	C _{iss}	V _{DS} =10V, V _{Gs} =0V, f=1MHz			40	pF
Output capacitance**	C _{oss}				30	
Reverse Transfer capacitance**	C _{rss}				10	
SWITCHING TIME						
Turn-on Time**	t _{d(on)}	V _{DD} =50V, R _L =250Ω, V _{Gs} =10V, R _{GS} =50Ω, R _G =50Ω			10	ns
Turn-off Time**	t _{d(off)}				15	
Reverse recovery Time	t _{rr}	V _{Gs} =0V, I _S =300mA, V _R =25V, Dis/dt=-100a/uS		30		ns
GATE-SOURCE ZENER DIODE						
Gate-Source Breakdown Voltage	BV _{GSO}	I _{GS} =±1mA(Open Drain)	±21.5		±32	V

Notes: * Pulse Test: Pulse Width ≤300us, Duty Cycle≤2%.

** These parameters have no way to verify.

Typical characteristics
Output Characteristics

Transfer Characteristics

 $R_{DS(ON)}$ — I_D

 $R_{DS(ON)}$ — V_{GS}

 I_S — V_{SD}

Threshold Voltage


SOT-23 PACKAGE OUTLINE Plastic surface mounted package

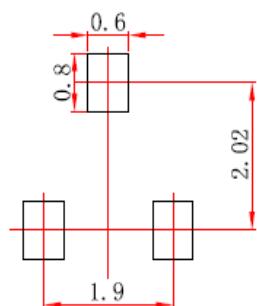


SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
θ	0°	8°

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: ± 0.05mm.
3. The pad layout is for reference purposes only.

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