

Features

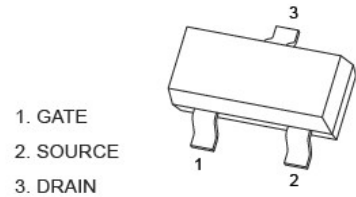
- ◆ High density cell design for low RDS(ON).
- ◆ Voltage controlled small signal switch.
- ◆ Rugged and reliable.
- ◆ High saturation current capability.
- ◆ ESD protected
- ◆ Load Switch for Portable Devices.
- ◆ DC/DC Converter.

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.

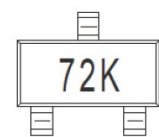
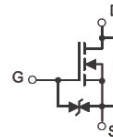
V(BR)DSS	RDS(ON)MAX	ID
60V	5Ω@10V	340mA
	5.3Ω@4.5V	

SOT-23



Equivalent circuit

MARKING



Maximum Ratings & Thermal Characteristics (TA=25°C unless otherwise specified)

参数 Parameters	符号 Symbol	数值 Value	单位 Unit
Drain-Source Voltage	VDS	60	V
Gate-Source Voltage	VGS	±20	V
Continuous Drain Current	ID	340	mA
Power Dissipation	PD	350	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-50-+150	°C
Thermal Resistance From Junction to Ambient	RθJA	357	°C/W

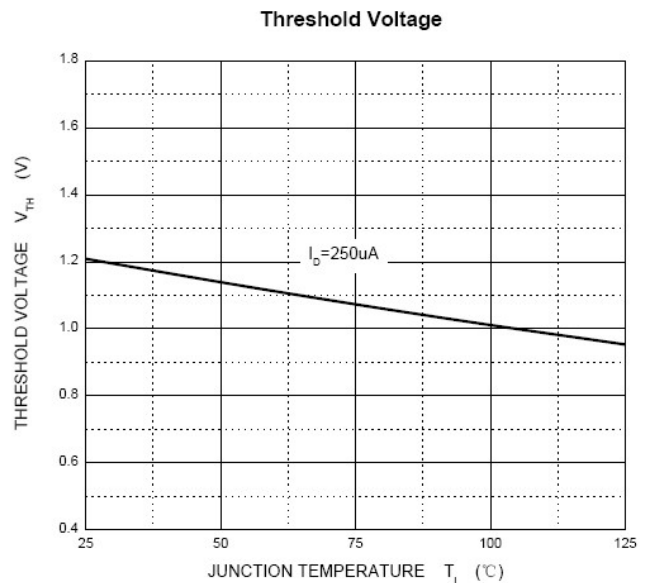
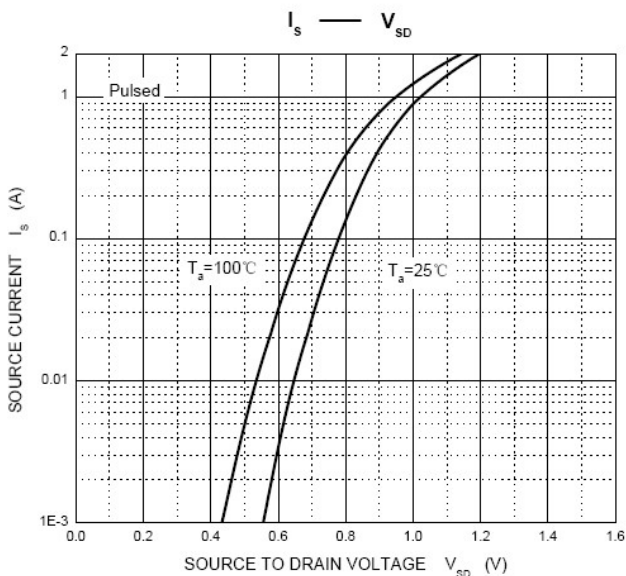
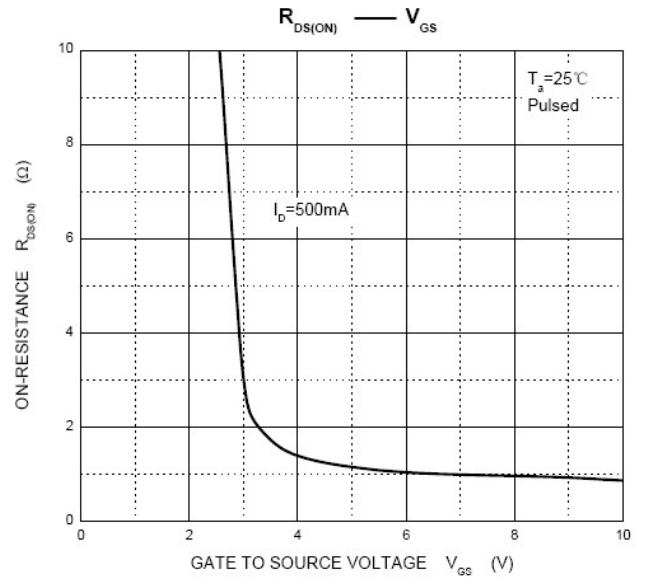
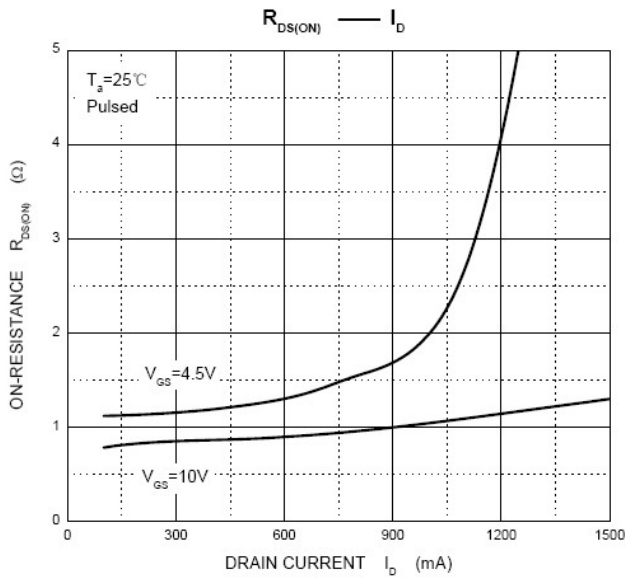
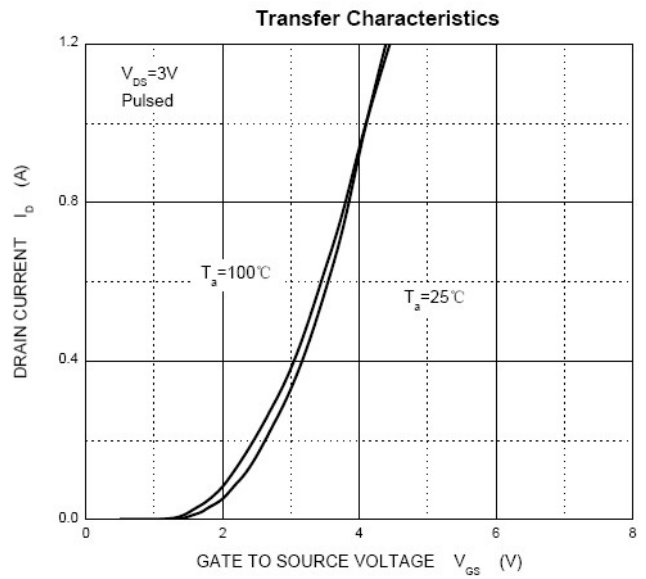
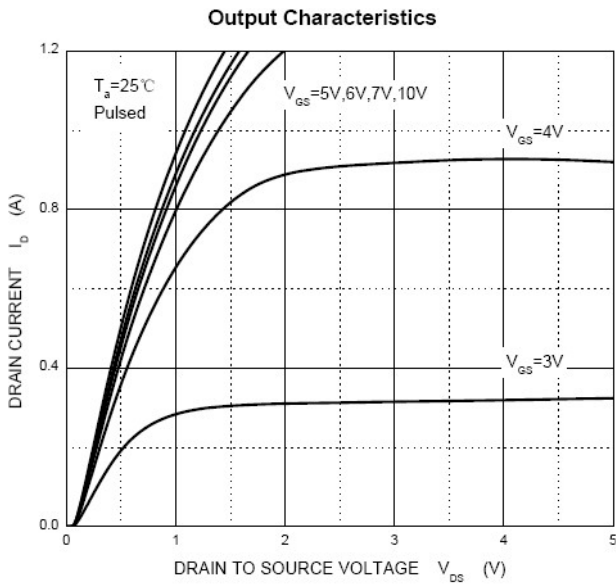
Electrical Characteristics (TA=25°C unless otherwise specified)

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	5	Ω
		VGS=4.5V, IC=200mA		1.1	5.3	
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	ttr	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		±30	V

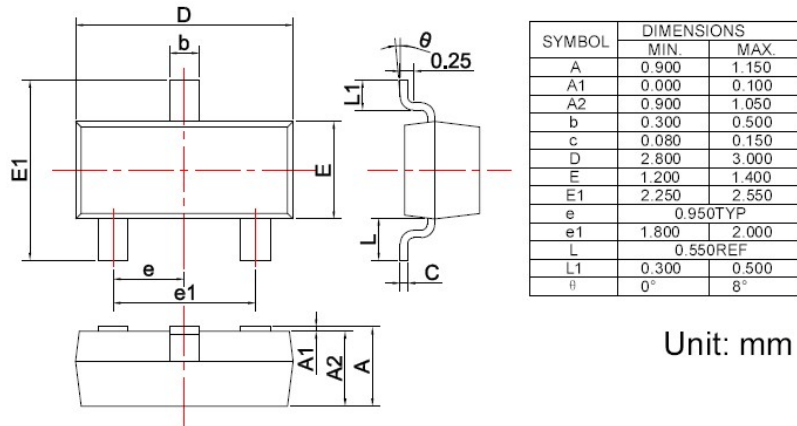
Notes: * Pulse Test: Pulse Width ≤300us, Duty Cycle≤2%.

** These parameters have on way to verify.

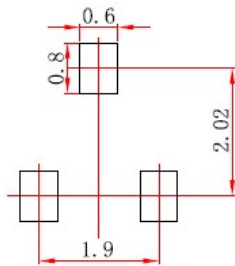
Typical Performance Characteristics (TA=25°C unless otherwise Specified)



SOT-23 Package Outline Drawing



Suggested Land Pattern



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