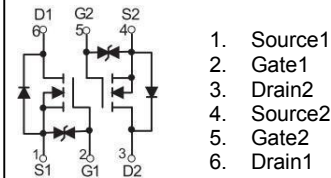
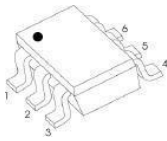


V(BR)DSS	RDS(ON)MAX	ID
60V	5Ω@10V	340mA
	5.3Ω@4.5V	

SOT-363 贴片塑封场效应管

SOT-363 Plastic-Encapsulate MOSFET

SOT-363



1. Source1
2. Gate1
3. Drain2
4. Source2
5. Gate2
6. Drain1

Marking: 72K

特征 Features

- 低导通电阻High density cell design for low $R_{DS(ON)}$.
- 压控小信号开关Voltage controlled small signal switch.
- 坚固可靠Rugged and reliable.
- 高饱和电流能力High saturation current capability.
- ESD保护ESD protected.
- 便携式设备负载开关Load Switch for Portable Devices.
- 直流-直流转换DC/DC Converter.

机械数据 Mechanical Data

- 封装: SOT-363 封装 SOT-363 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
漏-源电压 Drain-Source Voltage	V_{DS}	60	V
栅-源电压 Gate-Source Voltage	V_{GS}	± 20	V
漏极连续电流 Continuous Drain Current	I_D	340	mA
功耗 Power Dissipation	P_D	150	mW
结温 Junction Temperature	T_j	150	°C
储存温度 Storage Temperature	T_{stg}	-55~+150	°C
结环热阻 Thermal Resistance From Junction to Ambient	$R_{\theta JA}$	833	°C/W

电特性 (TA = 25°C 除非另有规定)

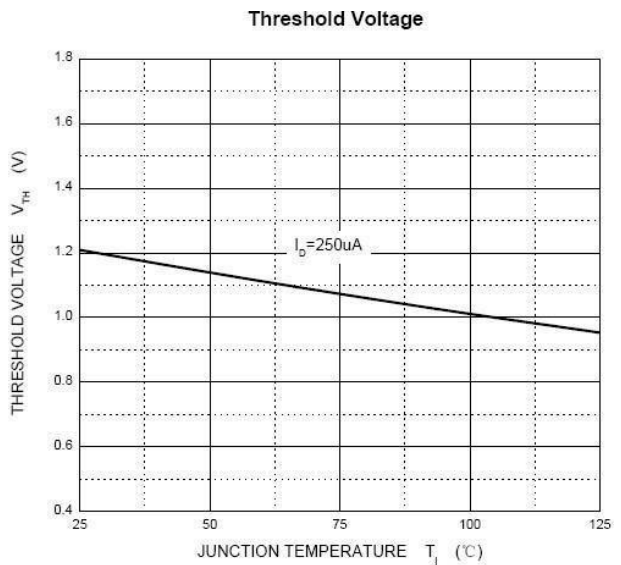
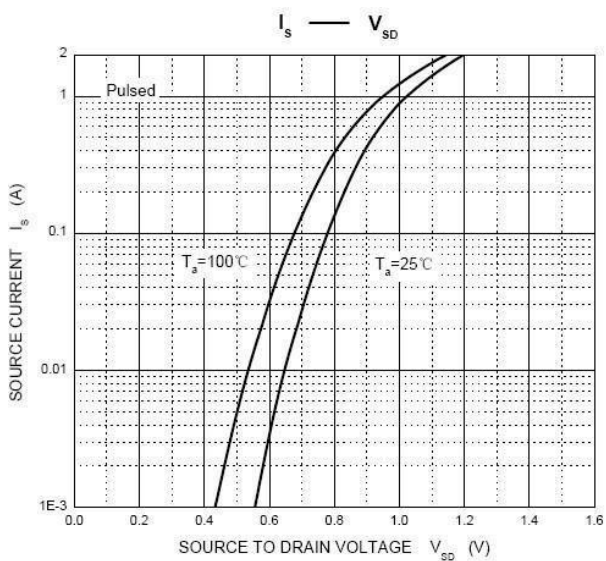
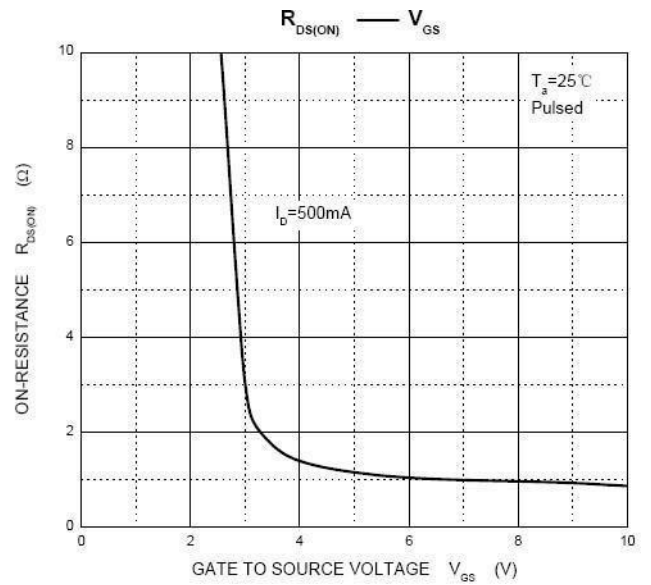
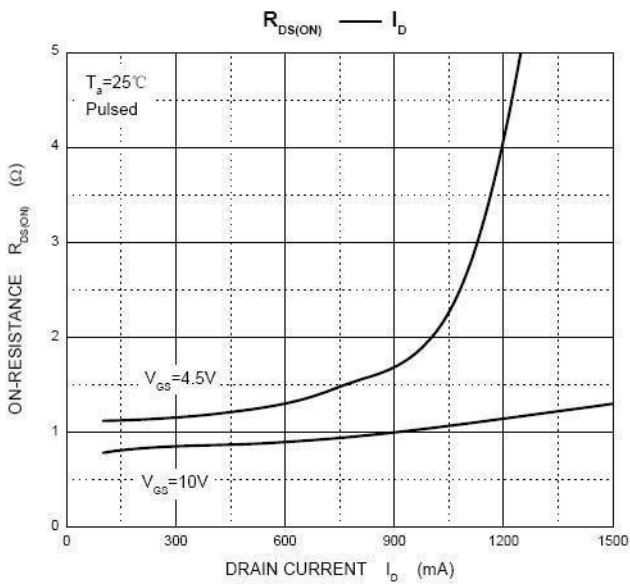
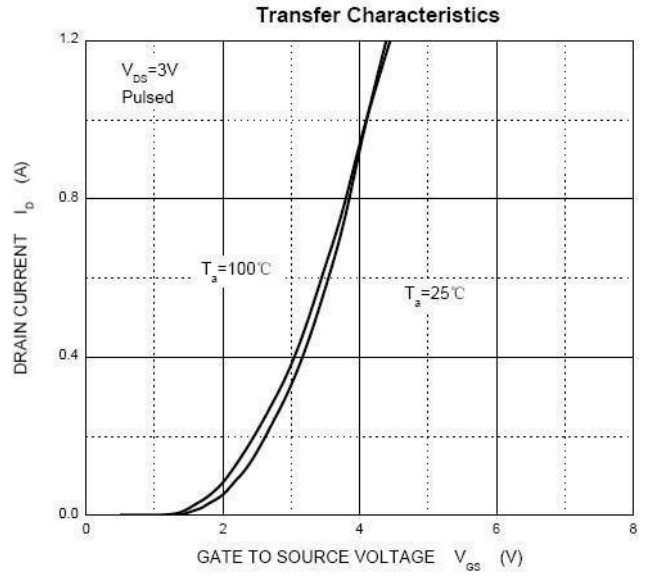
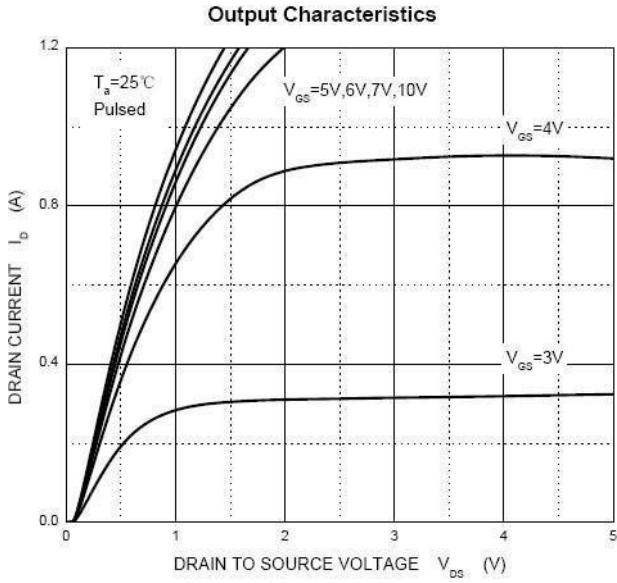
Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

参数 Parameter	符号 Symbols	测试条件 Test Condition	界限 Limits			单位 Unit
			Min	Typ	Max	
漏-源击穿电压 Drain-Source Breakdown Voltage	V_{DS}	$V_{GS}=0V, I_D=250\mu A$	60			V
栅-源阈值电压 Gate-Source Threshold voltage*	$V_{th(GS)}$	$V_{DS}=V_{GS}, I_D=1mA$	1	1.3	2.5	V
栅极漏电流 Gate-body Leakage	I_{GSS}	$V_{DS}=0V, V_{GS}=\pm 20V$			± 10	μA
零栅压漏极电流 Zero Gate Voltage Drain current	I_{DSS}	$V_{DS}=48V, V_{GS}=0V$			1	μA
漏-源极导通电阻 Drain-Source On-Resistance*	$R_{DS(ON)}$	$V_{GS}=10V, I_D=500mA$ $V_{GS}=4.5V, I_C=200mA$		0.9 1.1	5 5.3	Ω
二极管正向电压 Diode Forward voltage	V_{SD}	$I_S=300mA, V_{GS}=0V$			1.50	V
输入电容 Input capacitance**	C_{iss}	$V_{DS}=10V, V_{GS}=0V, f=1MHz$			40	pF
输出电容 Output capacitance**	C_{oss}				30	
反向恢复电容 Reverse Transfer capacitance**	C_{rss}				10	
开关时间 SWITCHING TIME						
开启时间 Turn-on Time**	$t_{d(on)}$	$V_{DD}=50V, R_L=250\Omega, V_{GS}=10V,$ $R_{GS}=50\Omega, R_G=50\Omega$			10	ns
关断时间 Turn-off Time**	$t_{d(off)}$				15	
反向恢复时间 Reverse recovery Time	t_{rr}	$V_{GS}=0V, I_S=300mA, V_R=25V,$ $Dis/dt=-100a/\mu s$		30		ns
栅-源齐纳二极管 GATE-SOURCE ZENER DIODE						
栅-源击穿电压 Gate-Source Breakdown Voltage	BV_{GSO}	$I_{GS}=\pm 1mA$ (Open Drain)	± 21.5		± 30	V

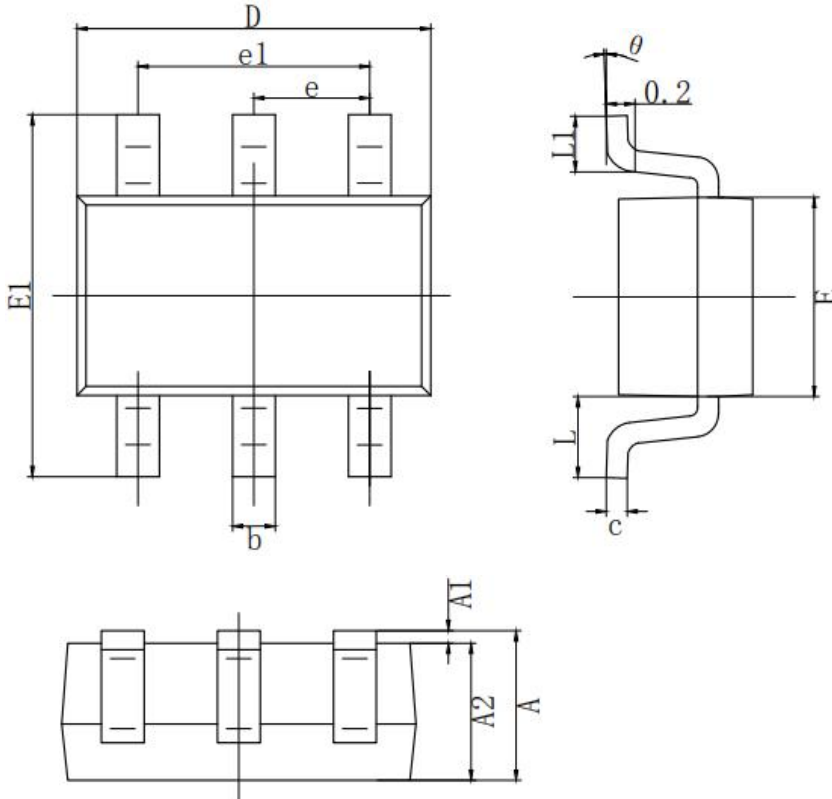
Notes: * Pulse Test: Pulse Width $\leq 300\mu s$, Duty Cycle $\leq 2\%$.

** These parameters have on way to verify.

典型特性曲线 Typical Characteristics Curve



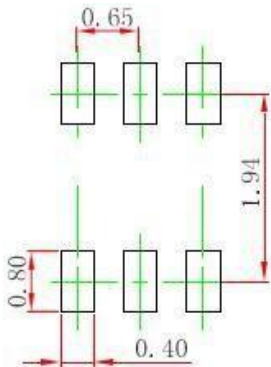
封装外形图SOT-363 PACKAGE OUTLINE



SYMBOL	MILLIMETER	
	MIN	MAX
A	0.900	1.100
A1	0.000	0.100
A2	0.900	1.000
b	0.150	0.350
c	0.080	0.150
D	2.000	2.200
E	1.150	1.350
E1	2.150	2.450
e	0.650 TYP.	
e1	1.200	1.400
L	0.525 REF.	
L1	0.260	0.460
θ	0°	8°

焊盘设计参考Precautions: PCB Design

Recommended land dimensions for SOT-363. Electrode patterns for PCBs



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ±0.05mm.
3. The pad layout is for reference purposes only.