

描述 / Descriptions

SOT-363 塑封封装 N 沟道 MOS 场效应管。
N-CHANNEL MOSFET in a SOT-363 Plastic Package.

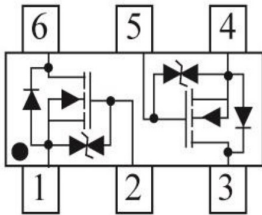
特征 / Features

输出电阻小、性能高；SOT-363 封装，利于设计安装。静电保护达 1500V
Low RDS(on), rugged and reliable, compact industry standard SOT-363 surface mount package. ESD protected up to 1500V

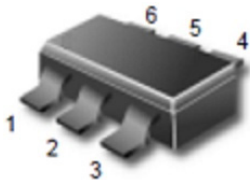
用途 / Applications

用于直流-直流转换器，电源管理便携式和电池供电的产品。
Typical applications are dc-dc converters, portable power management and battery-Charging products.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN 1 : S1

PIN 2 : G1

PIN 3 : D2

PIN 4 : S2

PIN 5 : G2

PIN 6 : D1

印章代码 / Marking

Marking

见印章页

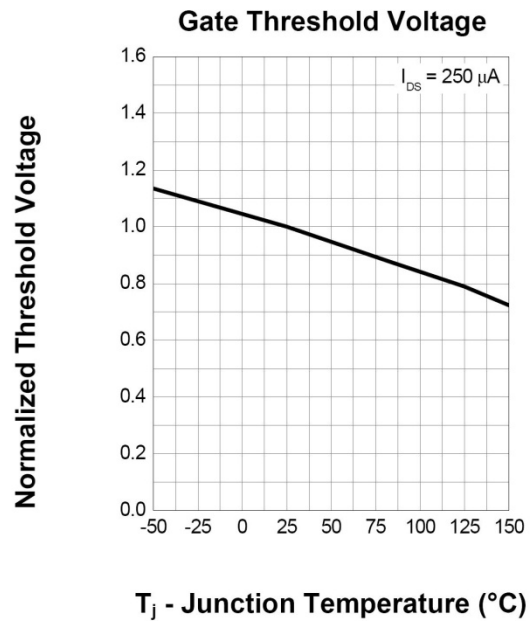
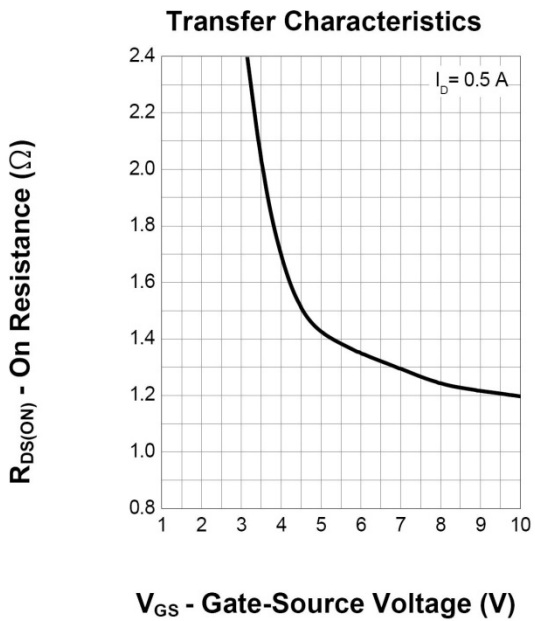
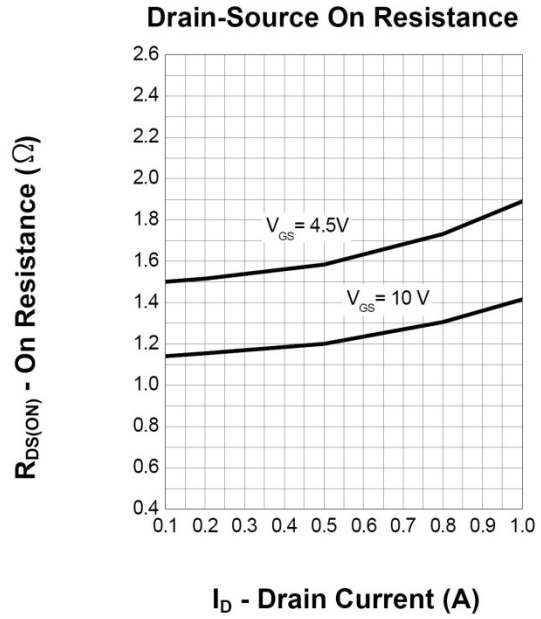
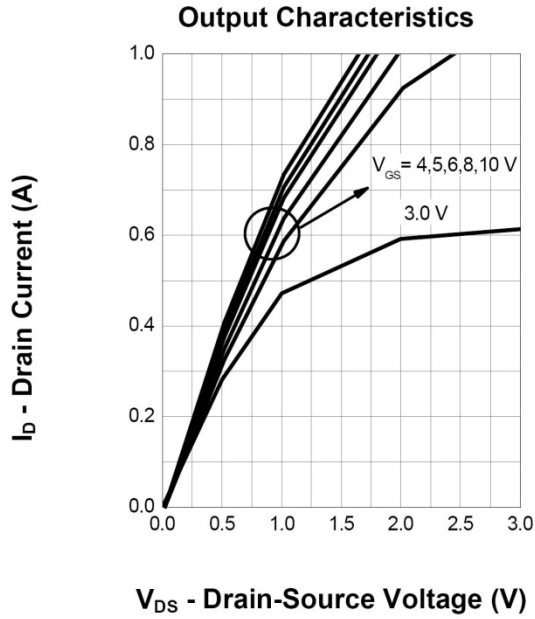
极限参数 / Absolute Maximum Ratings(Ta=25°C)

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Drain-Source Voltage	V_{DSS}	50	V
Gate-Source Voltage	V_{GSS}	±20	V
Drain Current – Continuous	I_D	200	mA
Peak Drain Current	I_{DM}	800	mA
Power Dissipation	P_D	380	mW
Thermal Resistance, Junction-to-Ambient	$R_{\theta JA}$	328	°C/W
Storage Temperature Range	T_{stg}	-55~150	°C

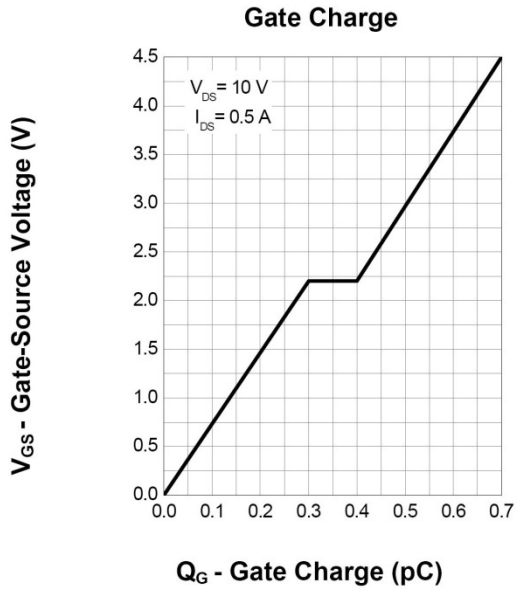
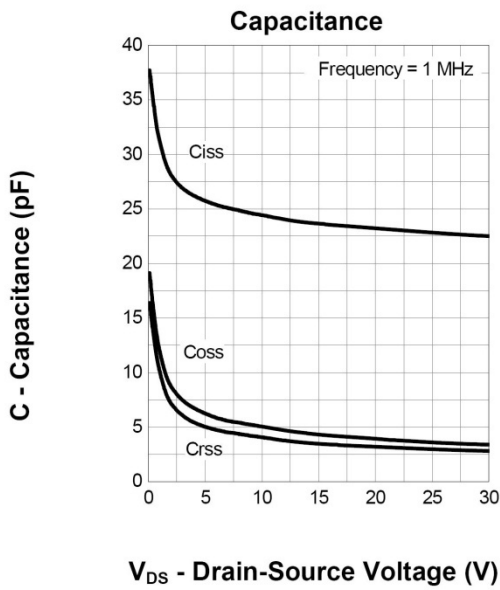
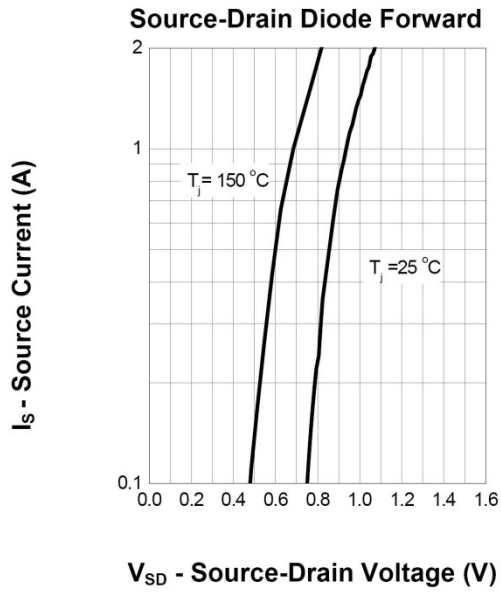
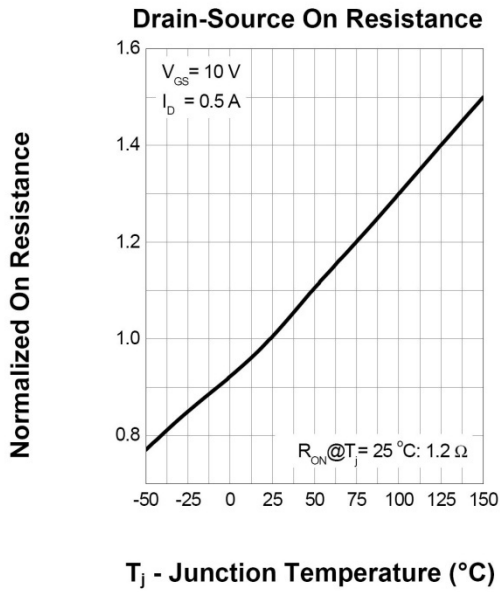
电性能参数 / Electrical Characteristics(Ta=25°C)

参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Drain-to-Source Breakdown Voltage	$V_{(BR)DSS}$	$V_{GS} = 0V \quad I_D = 250 \mu A$	50			V
Zero Gate Voltage Drain Current	$I_{DSS(1)}$	$V_{GS}=0 \quad V_{DS}=25V$			0.1	μA
	$I_{DSS(2)}$	$V_{GS}=0 \quad V_{DS}=50V$			0.5	μA
Gate-Body Leakage.	I_{GSS}	$V_{DS}=0V \quad V_{GS}=\pm 20$			±10	μA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS} \quad I_D=1.0mA$	0.5		1.5	V
Static Drain-Source On-Resistance	$R_{DS(on)(1)}$	$V_{GS}=10V \quad I_D=200mA$		2.5	3.5	Ω
	$R_{DS(on)(2)}$	$V_{GS}=4.5V \quad I_D=200mA$		3.1	5	Ω
	$R_{DS(on)(3)}$	$V_{GS}=2.75V \quad I_D<200mA$ $T_a=-40^\circ C \text{ to } +85^\circ C$		5.6	10	Ω
Forward Transconductance	g_{FS}	$V_{DS}=25V \quad I_D=200mA$	100			mS
Input Capacitance	C_{iss}	$V_{DS} = 25V \quad V_{GS} = 0$ $f = 1.0 \text{ MHz}$		22.8		pF
Output Capacitance	C_{oss}	$V_{DS} = 25V \quad V_{GS} = 0$ $f = 1.0 \text{ MHz}$		3.5		
Transfer Capacitance	C_{rss}	$V_{DS} = 25V \quad V_{GS} = 0$ $f = 1.0 \text{ MHz}$		2.9		
Turn-On Delay Time	$t_{d(on)}$	$V_{DS} = 30V \quad I_{DS} = 0.5A$		3.8		ns
Turn-Off Delay Time	$t_{d(off)}$			19	36	ns

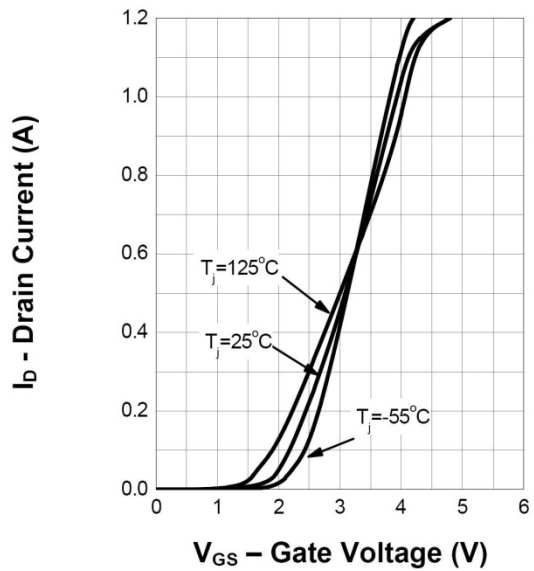
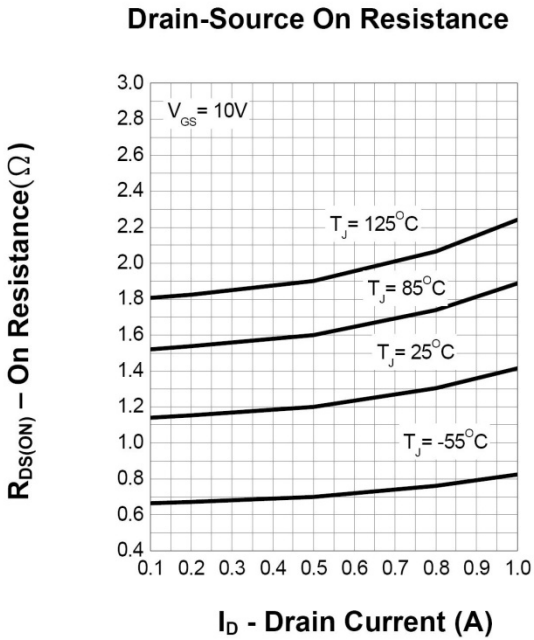
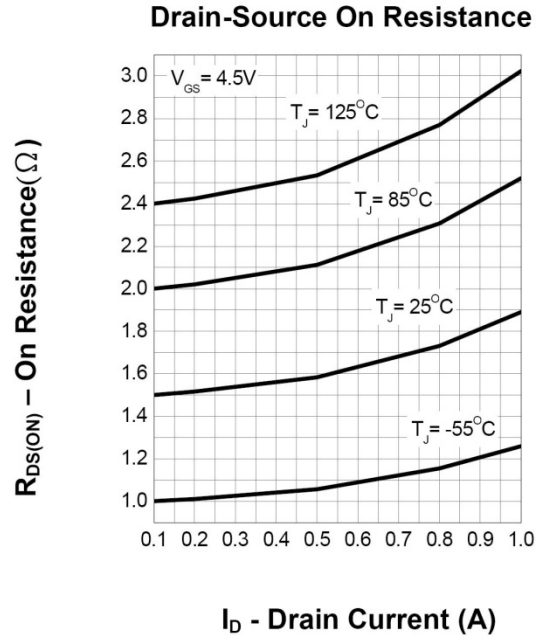
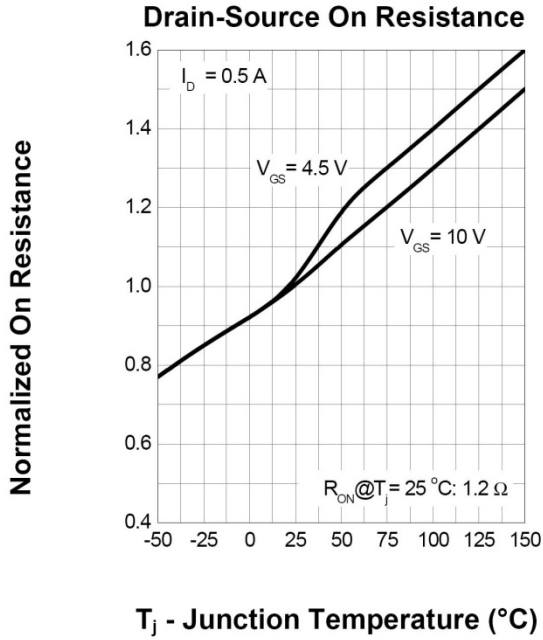
电参数曲线图 / Electrical Characteristic Curve



电参数曲线图 / Electrical Characteristic Curve

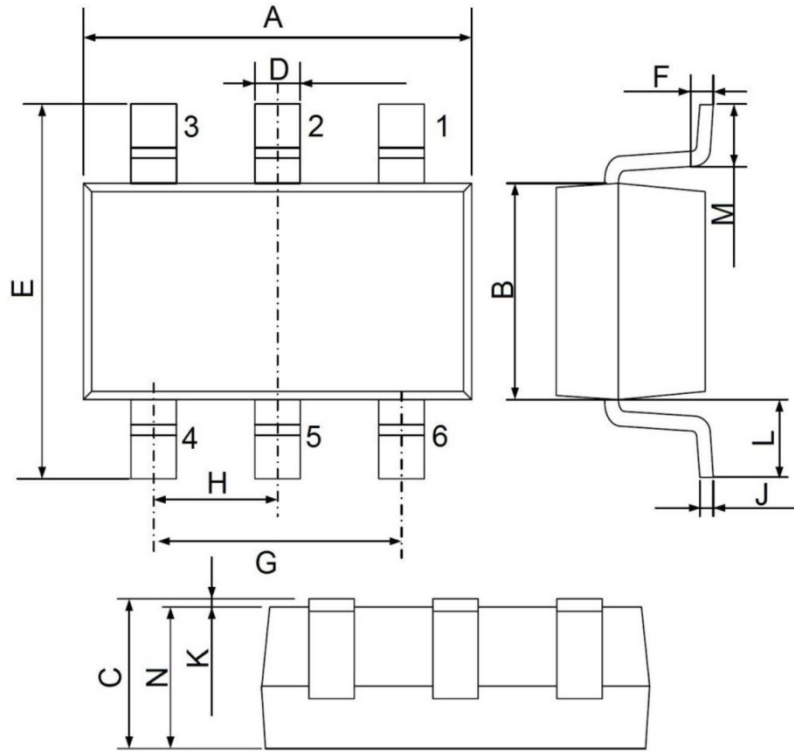


电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions

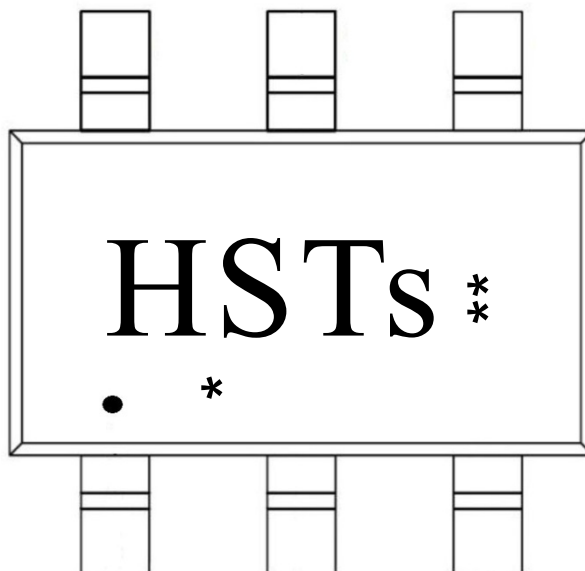
SOT-363-6L



UNIT: mm

DIM	MIN	MAX
A	2.00	2.20
B	1.15	1.35
C	0.90	1.10
D	0.15	0.35
E	2.15	2.45
F	0.20 Typ.	
G	1.20	1.40
H	0.65 Typ.	
J	0.08	0.15
K	0.00	0.10
L	0.525 Ref.	
M	0.26	0.46
N	0.90	1.00

印章说明 / Marking Instructions



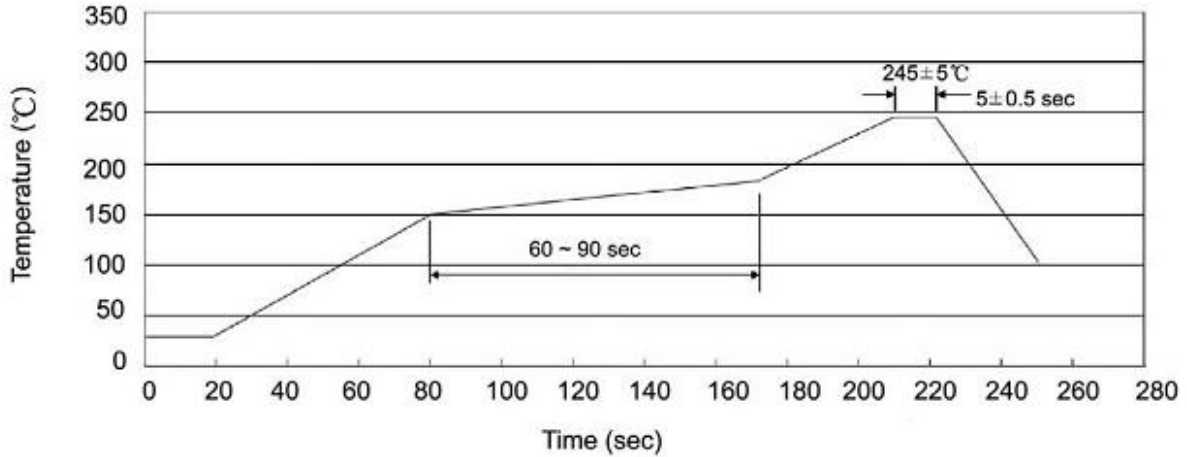
说明：

- ： 为“1”脚
- H： 为公司代码
- STs： 为型号代码
- ***： 为生产批号代码，随生产批号变化

Note:

- ： "1" Pin
- H: Company Code.
- STs: Product Type.
- ***: Lot No. Code, code change with Lot No.

回流焊温度曲线图(无铅) / Temperature Profile for IR Reflow Soldering(Pb-Free)



说明：

- 1、预热温度 150~180°C，时间 60~90sec;
- 2、峰值温度 245±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2~10°C/sec.

Note:

- 1.Preheating:150~180°C, Time:60~90sec.
- 2.Peak Temp.:245±5°C, Duration:5±0.5sec.
- 3.Cooling Speed: 2~10°C/sec.

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

温度：260±5°C

时间：10±1 sec.

Temp.:260±5°C

Time:10±1 sec

包装规格 / Packaging SPEC.

卷盘包装 / REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOT-363	3,000	10	30,000	8	240,000	7" ×8	180×120×180	385×257×392

使用说明 / Notices