

描述 / Descriptions

SOT-23 塑封封装 P 道 MOS 场效应管。
P- CHANNEL MOSFET in a SOT-23 Plastic Package.

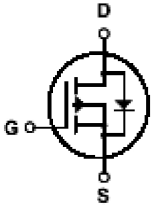
特征 / Features

芯片采用超高密度元胞设计技术， $R_{DS(ON)}$ 导通电阻小，SOT-23 封装。无卤产品。
Super high dense cell design for low $R_{DS(ON)}$,SOT-23 package. HF product.

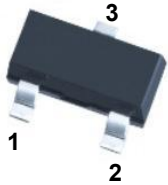
用途 / Applications

主要用于显示屏驱动。
Primarily the display screen drive applications.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN1 : G PIN 2 : S PIN 3 : D

印章代码 / Marking

Marking	A1H
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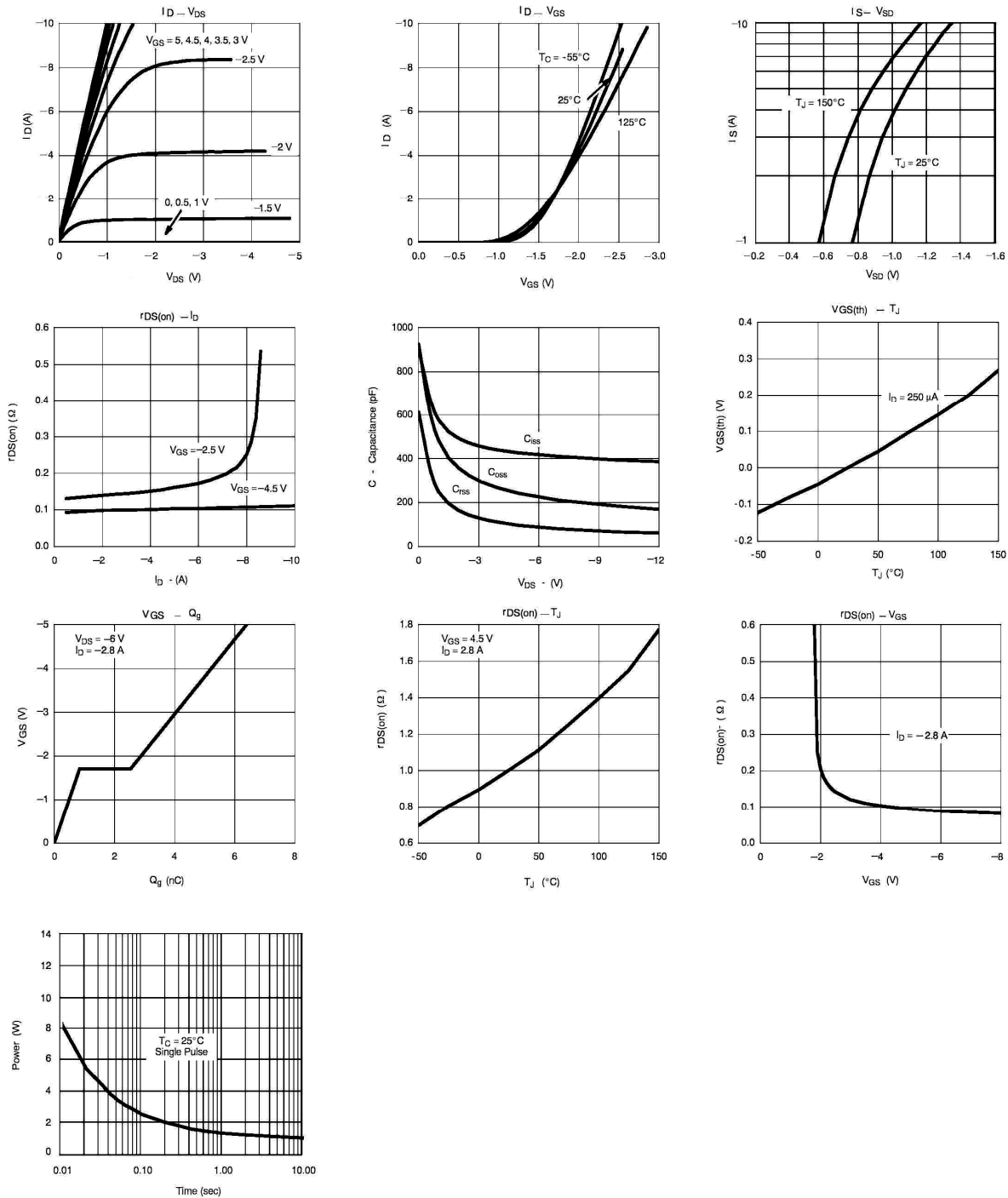
极限参数 / Absolute Maximum Ratings(Ta=25°C)

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Drain-Source Voltage	V_{DSS}	-20	V
Gate-Source Voltage	V_{GSS}	±8	V
Drain Current – Continuous	I_D	-2.8	A
Drain Current – Continuous	$I_D(T_A=70^\circ\text{C})$	-1.5	A
Pulsed Drain Current	I_{DM}	-10	A
Continuous Source Current (Diode Conduction)	I_S	-1.6	A
Power Dissipation	P_D	1.25	W
Power Dissipation	$P_D(T_A=70^\circ\text{C})$	0.8	W
Storage Temperature Range	T_{stg}	-55~+150	°C
Operating Junction Temperature Range	T_j	-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–Source Breakdown Voltage	$V_{(BR)DSS}$	$V_{GS}=0V$ $I_D=-250\mu A$	-20	-23		V
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=-250\mu A$	-0.45		-0.95	V
Static Drain–Source On–Resistance	$R_{DS(on)1}$	$V_{GS}=-4.5V$ $I_D=-2.8A$		0.068	0.13	Ω
	$R_{DS(on)2}$	$V_{GS}=-2.5V$ $I_D=-2.0A$		0.096	0.19	Ω
Zero Gate Voltage Drain Current	$I_{DSS(1)}$	$V_{DS}=-20V$ $V_{GS}=0V$			-1	μA
	$I_{DSS(2)}$	$V_{DS}=-20V$ $V_{GS}=0V$ $T_j=55^\circ\text{C}$			-10	μA
Gate–Body Leakage	I_{GSS}	$V_{GS}=\pm 8V$ $V_{DS}=0V$			±0.1	μA
Drain–Source Diode Forward Voltage	V_{SD}	$I_S=-1.6A$ $V_{GS}=0V$		-0.8	-1.2	V
Forward Transconductance	g_{FS}	$V_{DS}=-5V$ $I_D=-2.8A$		6.5		S
Turn–On Delay Time	$t_{d(on)}$	$V_{DD}=-6V$ $R_L=6\Omega$ $I_D\approx-1A$ $R_G=6\Omega$ $V_{GEN}=-4.5V$		13	25	ns
Turn–On Rise Time	t_r			36	60	
Turn–Off Delay Time	$t_{d(off)}$			42	70	
Turn–Off Fall Time	t_f			34	60	

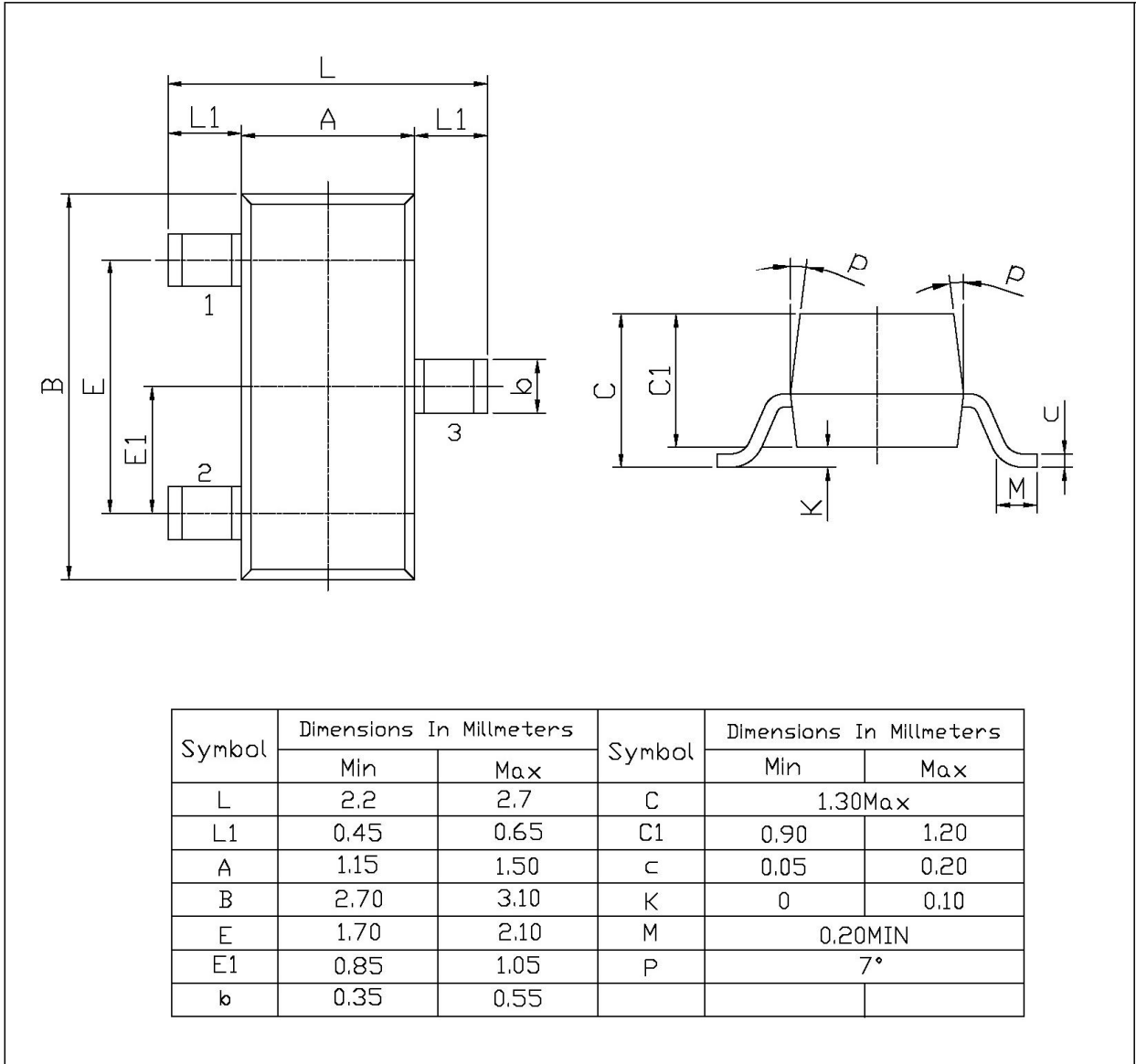
电参数曲线图 / Electrical Characteristic Curve



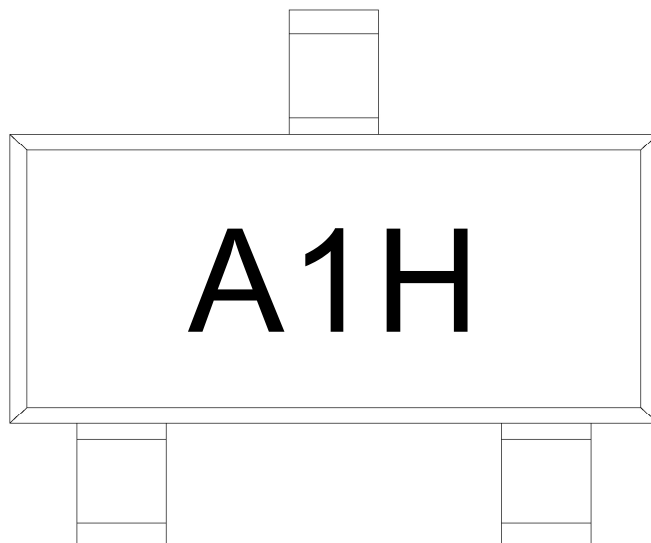
外形尺寸图 / Package Dimensions

SOT-23

单位: mm



印章说明 / Marking Instructions



说明：

A1: 为型号代码

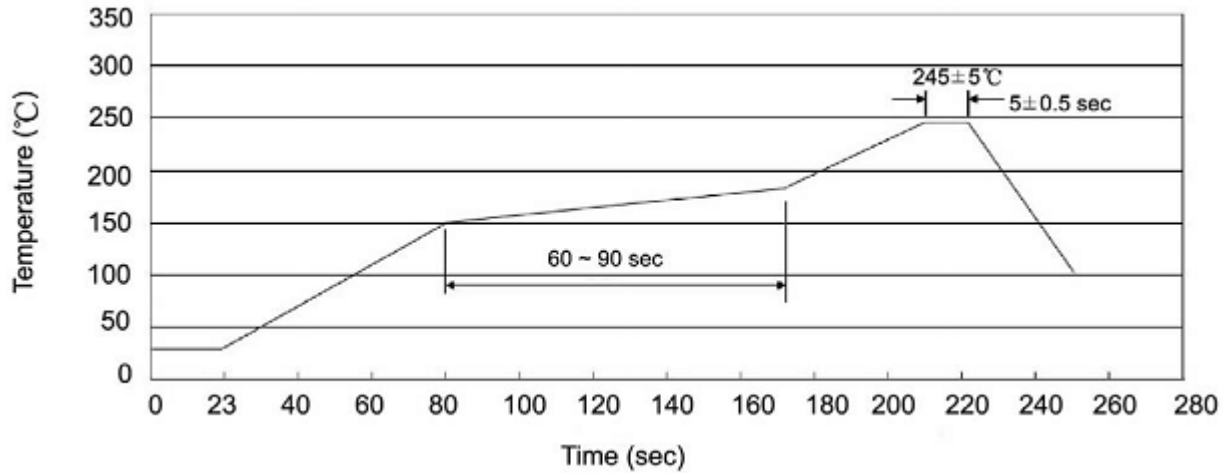
H: 为公司代码

Note:

A1 : Product Type

H: Company Code.

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 25 ~ 150°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:25~150°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-23	3,000	10	30,000	6	180,000	7" ×8	180×120×180	390×385×205

使用说明 / Notices