

DTA143TKA

Rev.B Mar.-2025

描述 / Descriptions

SOT-23 塑封封装 硅 PNP 数字三极管。Silicon PNP Digital transistor in a SOT-23 Plastic Package.

特征 / Features

内装偏置电阻，简化线路设计，减少元件和制造流程，无卤产品。

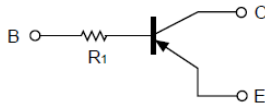
With built-in bias resistors, simplify circuit design, reduce a quantity of parts and manufacturing process, HF Product.

用途 / Applications

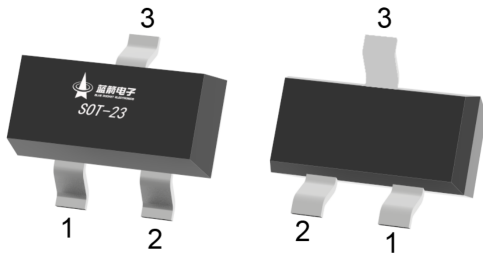
用于开关、反相电路、界面电路以及驱动电路中。

Switching, inverter circuit, interface circuit and driver circuit applications.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN 1 : Base

PIN 2 : Emitter

PIN 3 : Collector

放大及印章代码 / h_{FE} Classifications & Marking

Marking	H93
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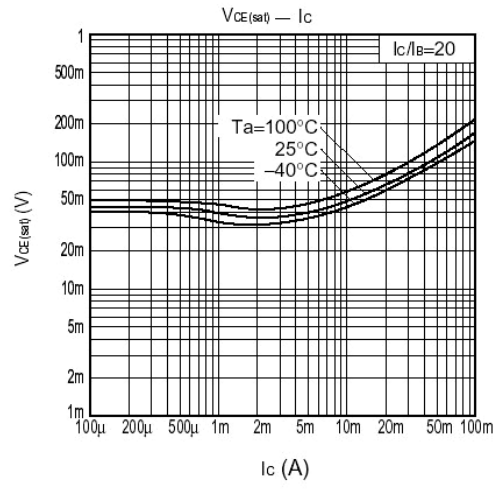
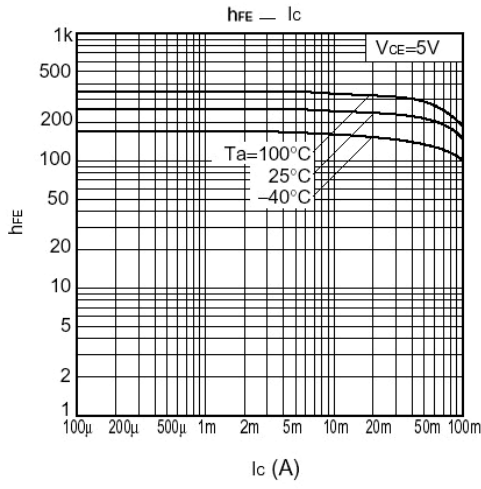
极限参数 / Absolute Maximum Ratings(Ta=25°C)

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Collector-Base Voltage	V _{CBO}	-50	V
Collector-Emitter Voltage	V _{CEO}	-50	V
Emitter-Base Voltage	V _{EBO}	-5	V
Collector Current	I _C	-100	mA
Power Dissipation	P _C	200	mW
Junction Temperature	T _j	150	°C
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
Collector-Base Voltage	V _{CBO}	I _C =-50μA	-50			V
Collector-Emitter Voltage	V _{CEO}	I _C =-1.0mA	-50			V
Emitter-Base Voltage	V _{EBO}	I _E =-50μA	-5			V
Collector Cut-off Current	I _{CBO}	V _{CB} =-50V			-0.5	μA
Emitter Cut-off Current	I _{EBO}	V _{EB} =-4.0V			-0.5	μA
DC Current Gain	h _{FE}	V _{CE} =-5.0V I _C =-1.0mA	100	250	600	
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C =-5.0Ma I _B =-0.25mA			-0.3	V
Transition Frequency	f _T	V _{CE} =-10V I _C =-5.0mA f _T =100MHz		250		MHz
Resistance1	R1		3.29	4.7	6.11	KΩ

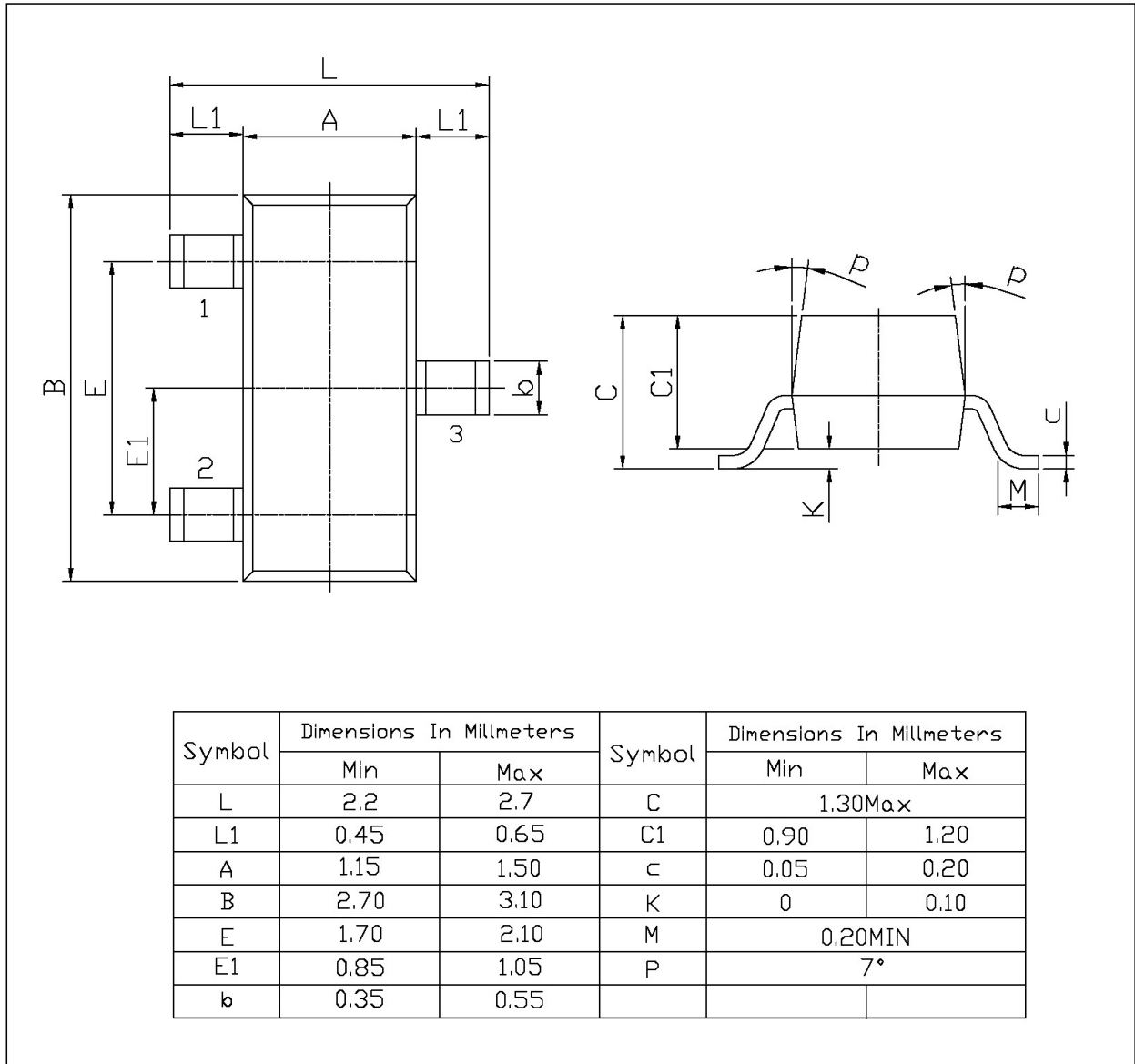
电参数曲线图 / Electrical Characteristic Curve



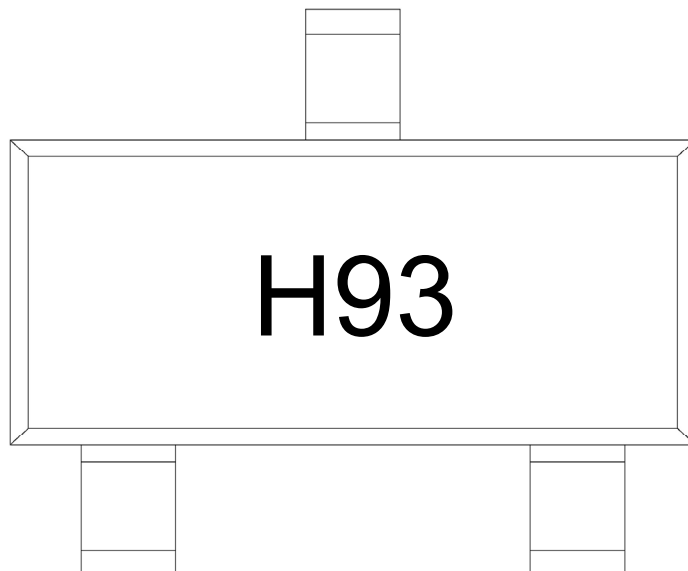
外形尺寸图 / Package Dimensions

SOT-23

单位: mm



印章说明 / Marking Instructions



说明：

H： 为公司代码

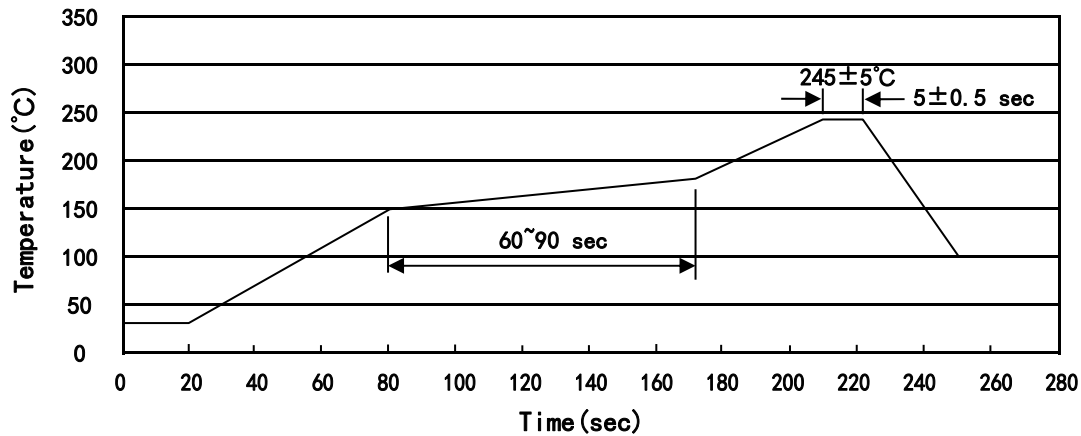
93： 为型号代码

Note:

H： Company Code

93： Product Type 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 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-23	3,000	10	30,000	6	180,000	7" ×8	180×120×180	390×385×205

使用说明 / Notices