

# MPS751

Rev.E Mar.-2016

## 描述 / Descriptions

TO-92 塑封封装 PNP 半导体三极管。Silicon PNP transistor in a TO-92 Plastic Package.

## 特征 / Features

耐压高，饱和压降低，与 MPS651 互补。

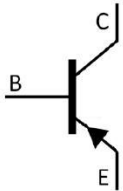
High  $V_{CEO}$ , low  $V_{CE(sat)}$ , Complementary pair with MPS651.

## 用途 / Applications

用于一般放大电路。

General amplifier applications.

## 内部等效电路 / Equivalent Circuit



## 引脚排列 / Pinning



PIN1 : Collector      PIN 2 : Base      PIN 3 : Emitter

## 放大及印章代码 / hFE Classifications & Marking

见印章说明。See Marking Instructions.

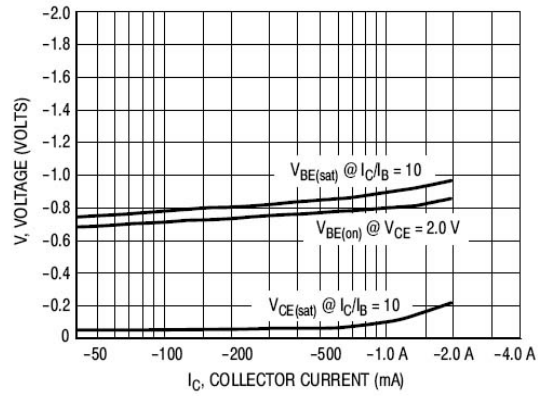
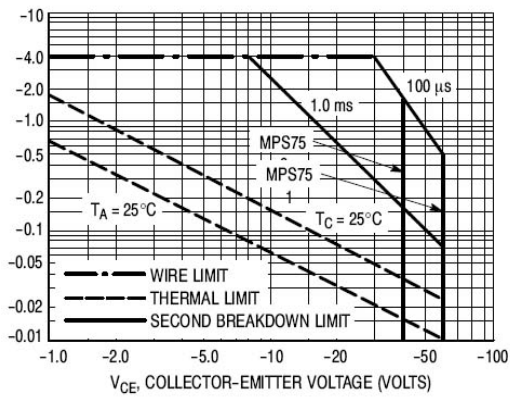
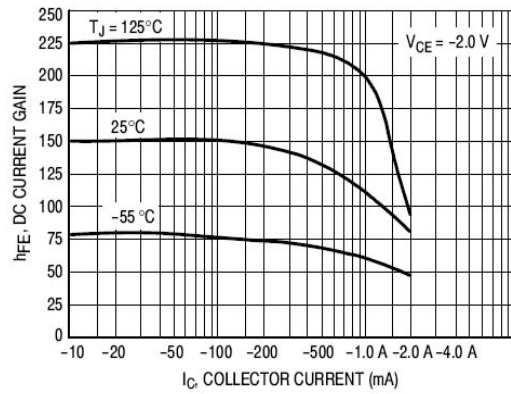
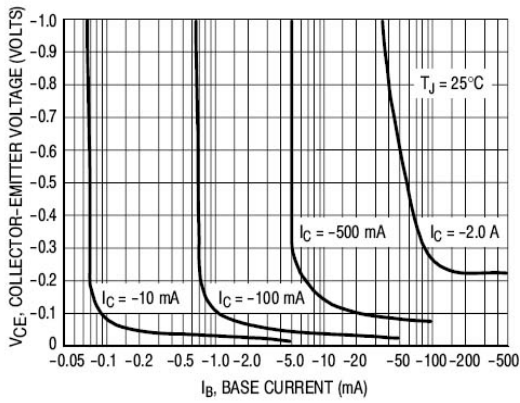
**极限参数 / Absolute Maximum Ratings(Ta=25°C)**

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Collector to Base Voltage	$V_{CBO}$	-80	V
Collector to Emitter Voltage	$V_{CEO}$	-60	V
Emitter to Base Voltage	$V_{EBO}$	-5.0	V
Collector Current - Continuous	$I_C$	-1.0	A
Collector Current – Continuous(Pulse)	$I_{CP}$	-2.0	A
Collector Power Dissipation	$P_C$	625	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 to Base Breakdown Voltage	$V_{CBO}$	$I_C=-100\mu A$ $I_E=0$	-80			V
Collector to Emitter Breakdown Voltage	$V_{CEO}$	$I_C=-10mA$ $I_B=0$	-60			V
Emitter to Base Breakdown Voltage	$V_{EBO}$	$I_E=-10\mu A$ $I_C=0$	-5			V
Collector Cut-Off Current	$I_{CBO}$	$V_{CB}=-50V$ $I_E=0$			-100	nA
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB}=-4V$ $I_C=0$			-100	nA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-2V$ $I_C=-50mA$	100		320	
	$h_{FE(2)}$	$V_{CE}=-2V$ $I_C=-1A$	30			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-500mA$ $I_B=-50mA$		-0.15	-0.5	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-500mA$ $I_B=-50mA$		-0.85	-1.2	V
Base to Emitter On Voltage	$V_{BE(on)}$	$I_C=-1A$ $V_{CE}=-2V$			-1.0	V
Transition Frequency	$f_T$	$I_C=-50mA$ $f=100MHz$ $V_{CE}=-10V$		150		MHz

电参数曲线图 / Electrical Characteristic Curve



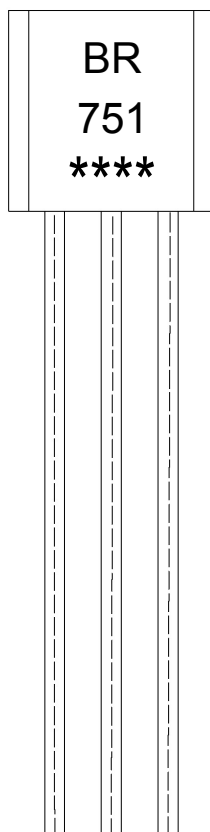
外形尺寸图 / Package Dimensions

TO-92

Unit: mm



印章说明 / Marking Instructions



说明：

BR: 为公司代码

751 : 为型号代码

\*\*\*\* : 为生产批号代码，随生产批号变化。

Note:

BR: Company Code.

751: Product Type.

\*\*\*\*: Lot No. Code,code change with Lot No.

**波峰焊温度曲线图(无铅) / Temperature Profile for Dip Soldering(Pb-Free)**



说明：

- 1、预热温度 25 ~ 150°C，时间 60 ~ 90sec;
- 2、峰值温度 255±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.:255±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：270±5°C

时间：10±1 sec.

Temp:270±5°C

Time:10±1 sec

**包装规格 / Packaging SPEC.**

散件包装 / BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm3)		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
TO-92	1,000	10	10,000	5	50,000	135×190	237×172×102	560×245×195
	1,000	10	10,000	10	100,000	135×190	237×172×102	560×245×375

编带包装 / AMMO

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm3)	
	Units/tape 只/纸带	Tape/Inner Box 纸带/盒	Rows/Inner Box 纸带层/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Inner Box 盒	Outer Box 箱
TO-92	3,000	1	120	10	30,000	328×230×42	小箱 480×346×235, 大箱 547×407×268

**使用说明 / Notices**