

描述 / Descriptions

TO-252 塑封封装 PNP 半导体三极管。

Silicon PNP transistor in a TO-252 Plastic Package.

特征 / Features

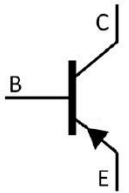
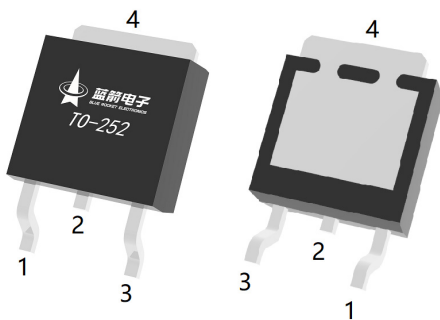
与 BRMJD44DP 互补，无卤产品。

Complement to BRMJD44DP,HF product.

用途 / Applications

用于中功率线性开关。

Medium power linear switching applications.

内部等效电路 / Equivalent Circuit**引脚排列 / Pinning**

PIN1 : Base

PIN 2,4 : Collector

PIN 3 : Emitter

放大及印章代码 / h_{FE} 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}	-80	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-8.0	A
Collector Peak Current	I_{CM}	-16.0	A
Collector Power Dissipation	$P_D(T_A=25^{\circ}\text{C})$	1.75	W
Collector Power Dissipation	$P_D(T_C=25^{\circ}\text{C})$	20	W
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-55~150	$^{\circ}\text{C}$

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 Emitter Breakdown Voltage	V_{CEO}	$I_C = -30\text{mA}$ $I_B = 0$	-80			V
Collector Cut-Off Current	I_{CES}	$V_{CE} = -80\text{V}$ $V_{BE} = 0$			-1.0	μA
Emitter Cut-Off Current	I_{EBO}	$V_{BE} = -5.0\text{V}$ $I_C = 0$			-1.0	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE} = -1.0\text{V}$ $I_C = -2.0\text{A}$	60		250	
	$h_{FE(2)}$	$V_{CE} = -1.0\text{V}$ $I_C = -4.0\text{A}$	40			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -8.0\text{A}$ $I_B = -400\text{mA}$			-1	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -8.0\text{A}$ $I_B = -800\text{mA}$			-1.5	V
Current- Gain Bandwidth Product	f_T	$I_C = -0.5\text{A}$ $V_{CE} = -10\text{V}$ $f = 20\text{MHz}$		90		MHz

电参数曲线图 / Electrical Characteristic Curve

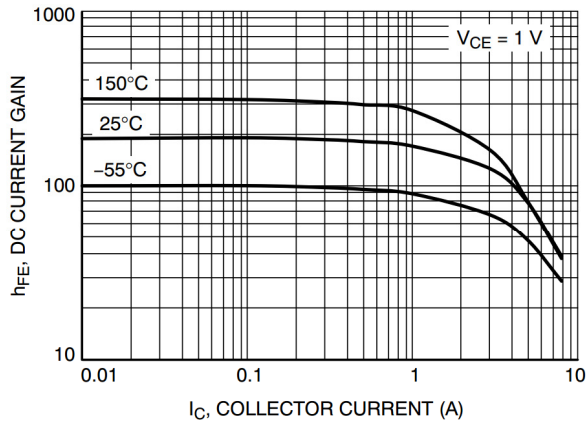


Figure 1. DC Current Gain

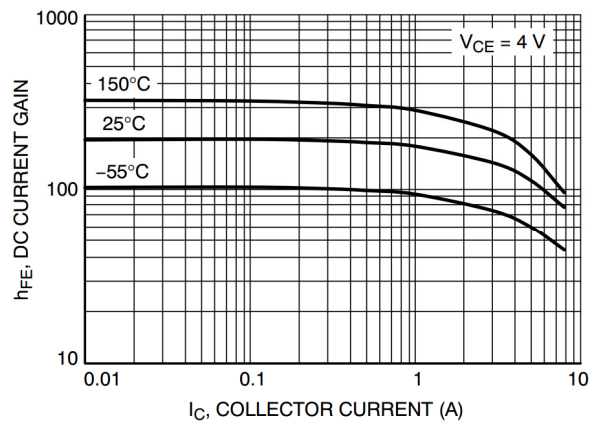


Figure 2. DC Current Gain

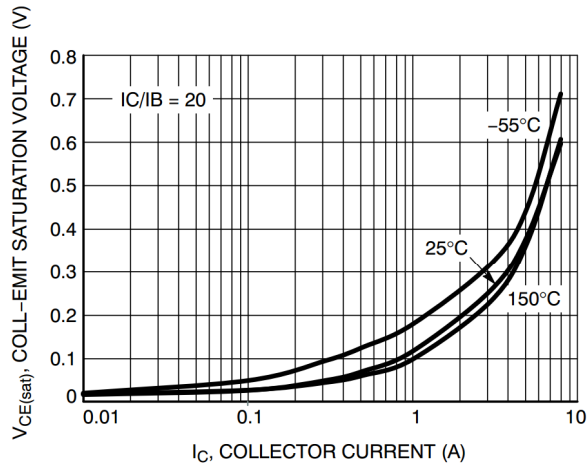


Figure 3. Saturation Voltage

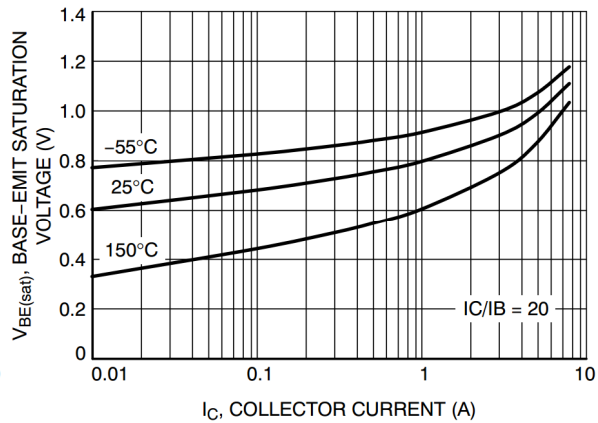
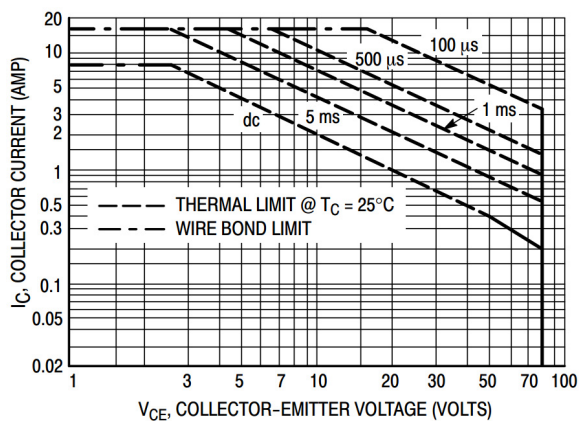
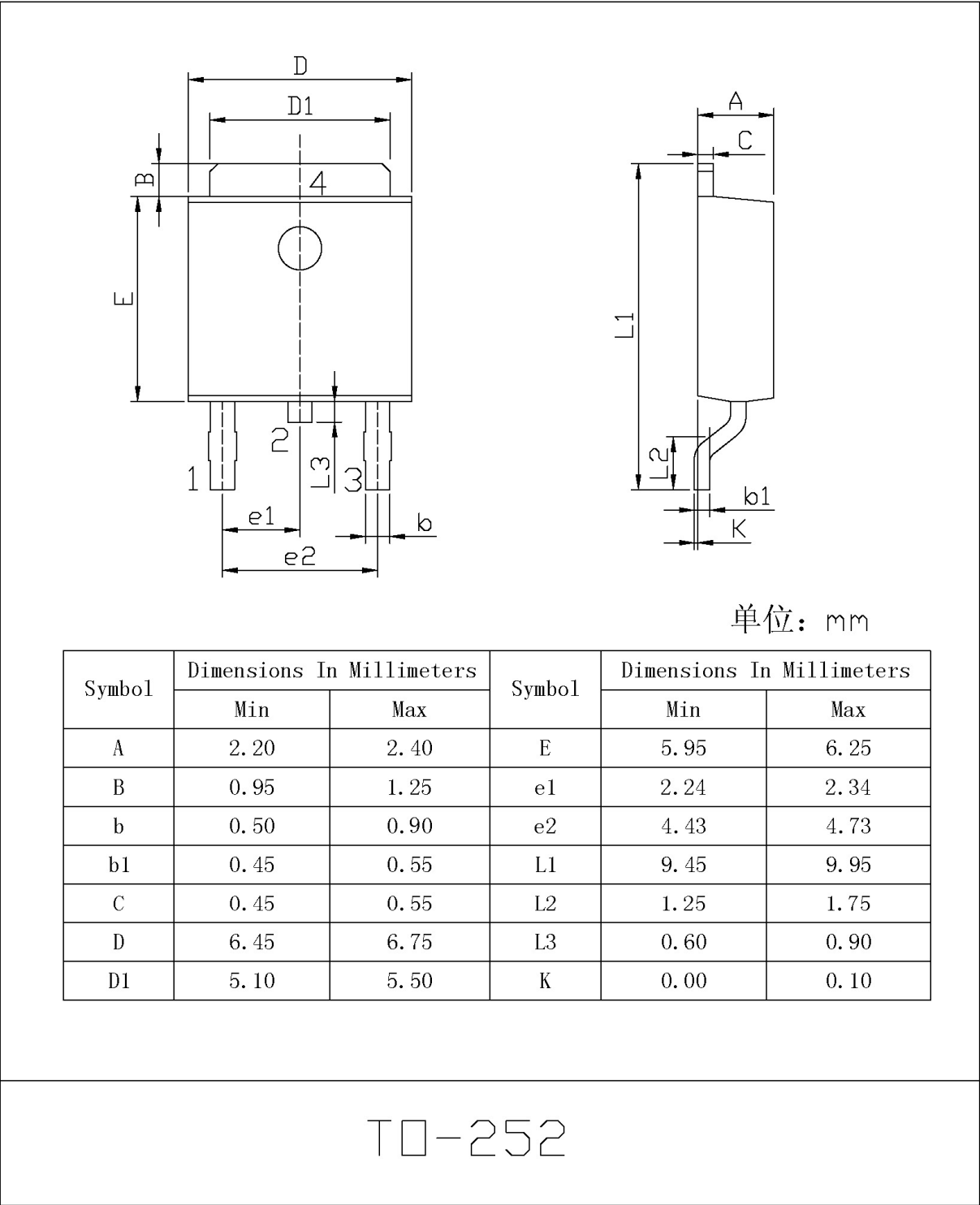
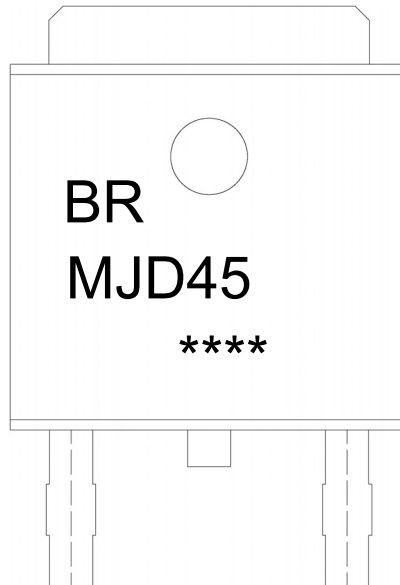


Figure 4. Saturation Voltage

Figure 5. Maximum Forward Bias
Safe Operating Area

外形尺寸图 / Package Dimensions



**印章说明 / Marking Instructions**

说明：

BR： 为公司代码

MJD45： 为型号代码

****： 为生产批号代码，随生产批号变化

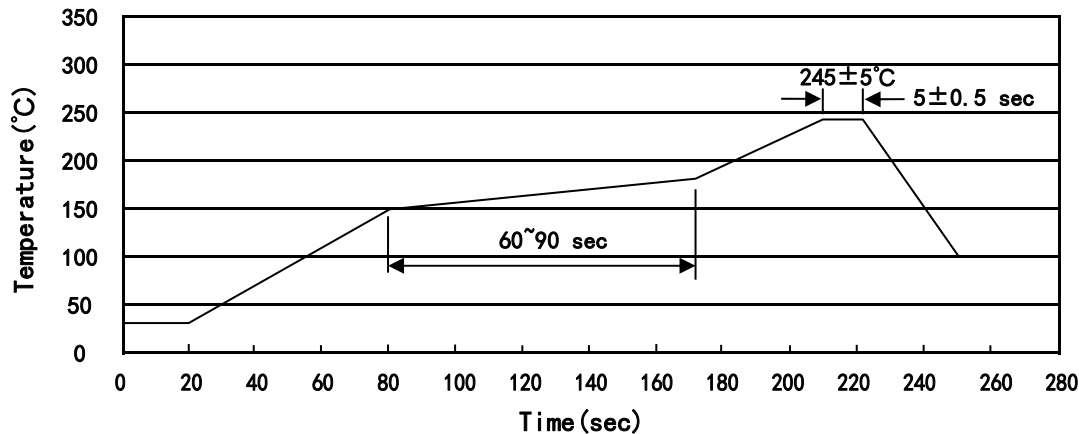
Note:

BR: Company Code

MJD45: Product Type Code

****: 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
TO-252	2,500	2	5,000	6	30,000	13" ×16	360×360×50	380×335×366

套管包装 / TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-251/252	75	48	3,600	5	18,000	526×20.5×5.25	555×164×50	575×290×180

使用说明 / Notices