

TIP35C

Rev.E Mar.-2016

描述 / Descriptions

TO-3P 塑封封装 NPN 半导体三极管。Silicon NPN transistor in a TO-3P Plastic Package.

特征 / Features

低漏电流，高电流增益带宽，与 TIP36C 互补。

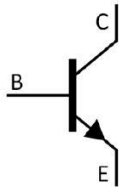
Low leakage current, high current gain bandwidth product, Complementary to TIP36C.

用途 / Applications

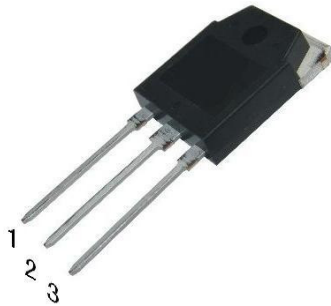
用于功率放大器和开关应用。

Power amplifier and switching applications.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN1 : Base PIN 2 : Collector PIN 3 : Emitter

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

见印章说明。See Marking Instructions.

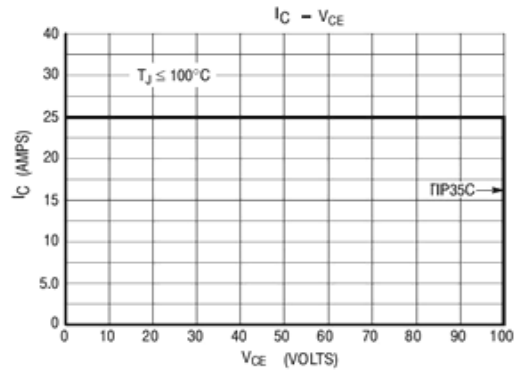
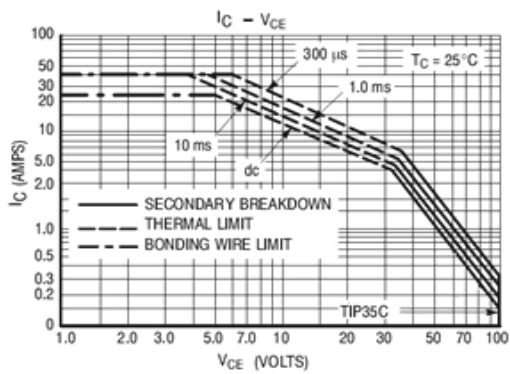
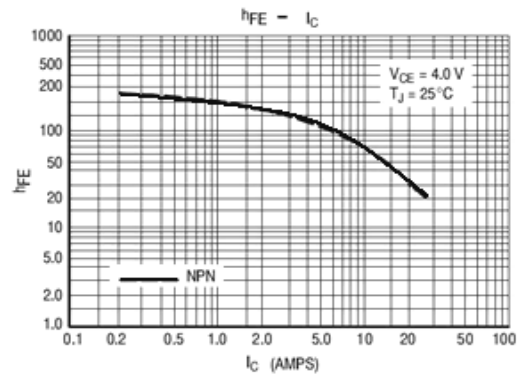
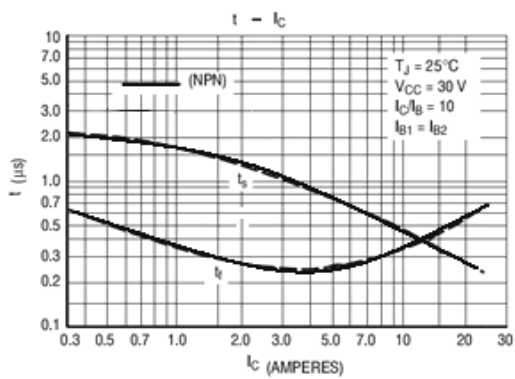
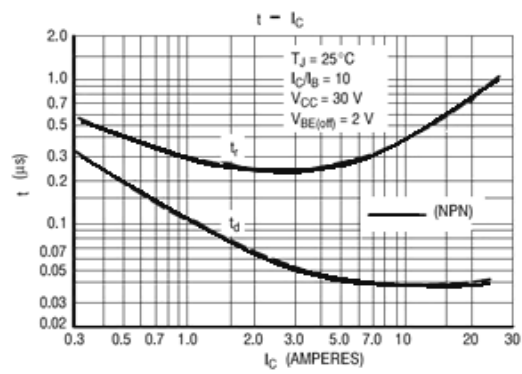
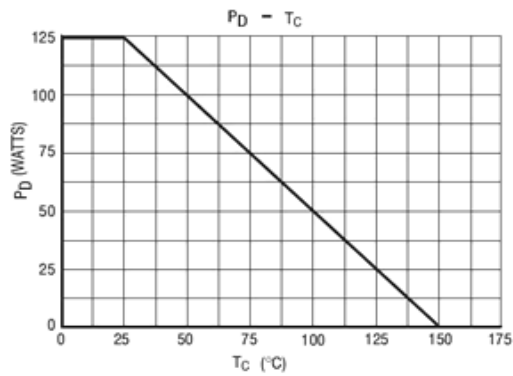
极限参数 / Absolute Maximum Ratings(Ta=25°C)

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Collector to Base Voltage	V_{CBO}	100	V
Collector to Emitter Voltage	V_{CEO}	100	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current - Continuous	I_C	25	A
Peak Collector Current	I_{CM}	50	A
Base Current	I_B	5	A
Total Power Dissipation	P_{tot}	125	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-65~150	°C
Thermal Resistance Junction	R_{thj}	1	°C/W

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 Cut-Off Current	I_{CEO}	$V_{CE}=60V$ $I_B=0$			1	mA
Collector Cut-Off Current	I_{CES}	$V_{CE}=\text{Rated } V_{CEO}$			0.7	mA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=5V$ $I_C=0$			1	mA
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=30mA$ $I_B=0$	100			V
DC Current Gain	$h_{FE(1)}$	$V_{CE}=4V$ $I_C=1.5A$	20		80	
	$h_{FE(2)}$	$V_{CE}=4V$ $I_C=15A$	10			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=15A$ $I_B=1.5A$			1.8	V
		$I_C=25A$ $I_B=5A$			4	V
Base to Emitter On Voltage	$V_{BE(ON)}$	$I_C=15A$ $V_{CE}=4V$			2	V
		$V_{CE}=4V$ $I_C=25A$			4	V
Transition Frequency	f_T	$V_{CE}=10V$ $f=1MHz$ $I_C=1A$	3			MHz

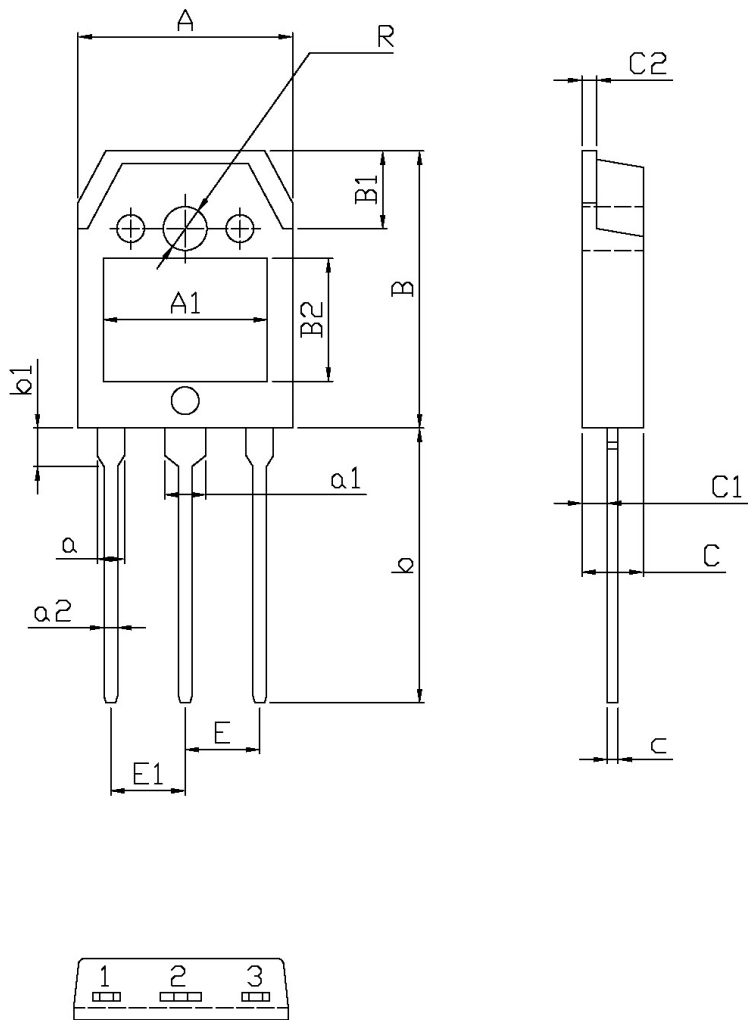
电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions

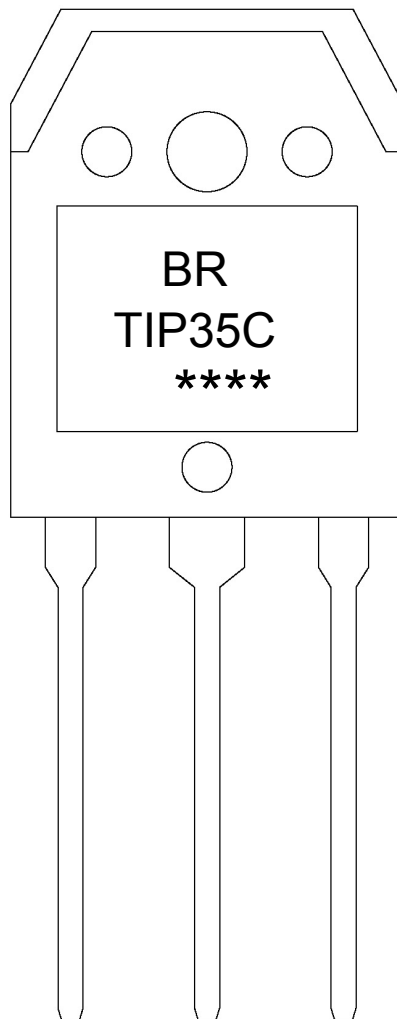
T□-3P

单位: mm



Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	15.4	16.0	a2	0.8	1.2
R	3.1	3.5	E	5.45	
B	19.8	20.8	E1	5.45	
B1	5.5	5.9	C	4.3	4.7
B2	9.0		C1	1.2	1.6
A1	12.0		C2	1.4	1.6
b	19.6	20.6	c	0.5	0.7
b1	3.0	3.4			
a	1.8	2.2			
a1	2.8	3.2			

印章说明 / Marking Instructions



说明：

BR: 为公司代码

TIP35C： 为产品型号

****： 为生产批号代码，随生产批号变化。

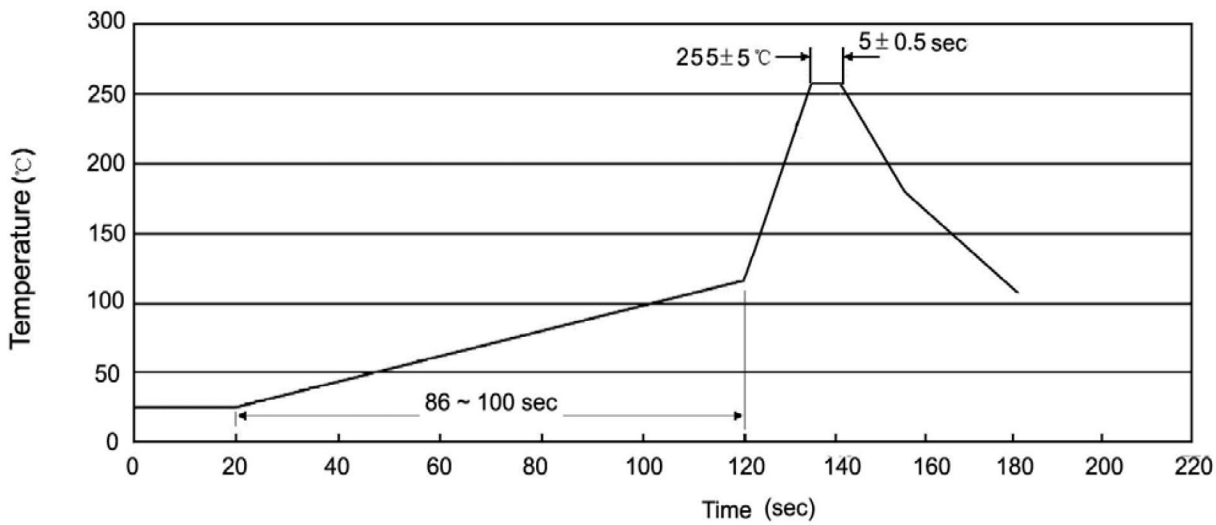
Note:

BR: Company Code.

TIP35C: 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℃，时间 60 ~ 90sec;
 - 2、峰值温度 255±5℃，时间持续为 5±0.5sec;
 - 3、焊接制程冷却速度为 2 ~ 10℃/sec.
- Note:

 - 1.Preheating:25~150℃, Time:60~90sec.
 - 2.Peak Temp.:255±5℃, Duration:5±0.5sec.
 - 3. Cooling Speed: 2~10℃/sec.

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

温度：270±5℃ 时间：10±1 sec. Temp.:270±5℃ Time:10±1 sec

包装规格 / Packaging SPEC.

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-3P	30	15	450	5	2250	497.5×46×8	555×164×50	575×290×180

使用说明 / Notices