

描述 / Descriptions

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

特征 / Features

低漏电流，高电流增益带宽，与 BRTIP35CPH 互补。

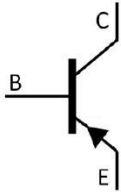
Low leakage current, High current gain bandwidth product, Complementary to BRTIP35CPH.

用途 / Applications

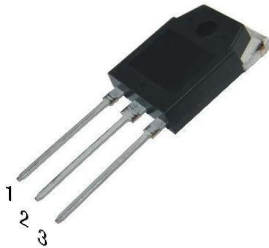
用于功率放大器和开关应用。

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

详见印章说明。See Marking Instructions

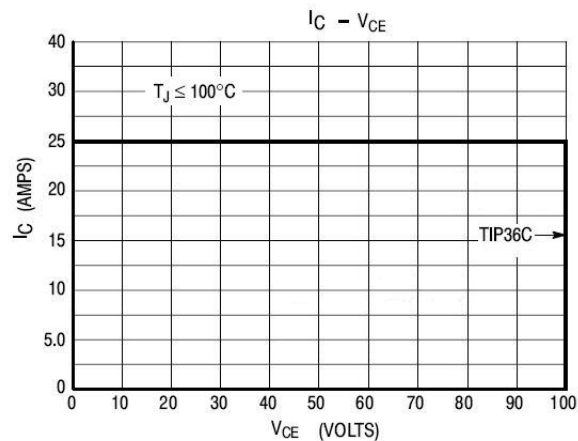
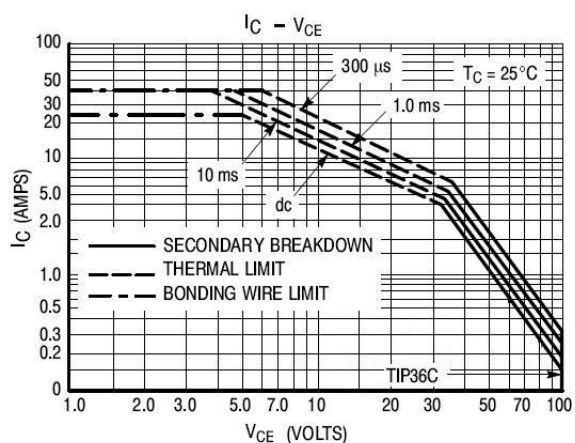
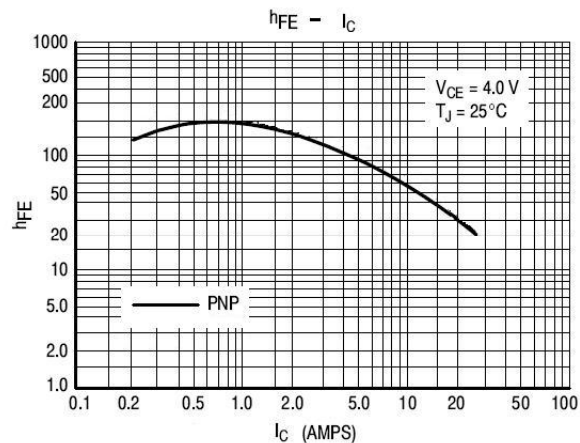
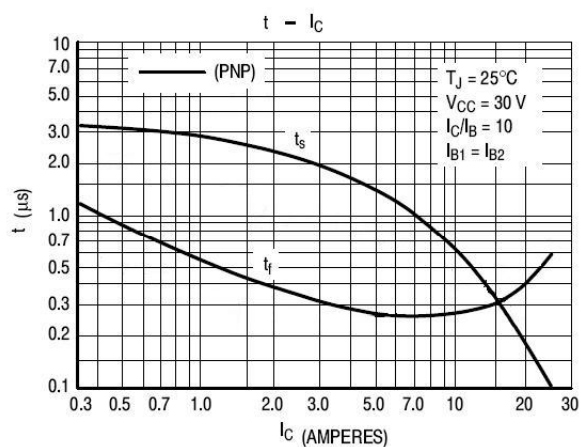
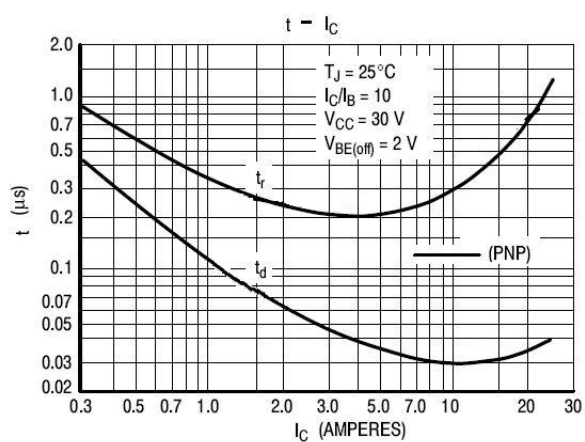
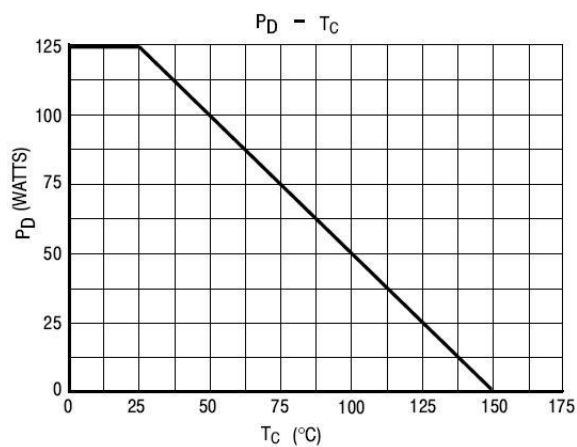
极限参数 / Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Rating	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	I_C	-25	A
Collector Peak Current	I_{CM}	-50	A
Base Current	I_B	-5	A
Total Dissipation	P_{tot}	125	W
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-65~150	°C
Thermal Resistance Junction-case	$R_{\theta JC}$	1.0	°C/W

电性能参数 / Electrical Characteristics(Ta=25°C)

Parameter	Symbol	Test Conditions	Min	Typ	Max	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-Emitter Sustaining 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		100	
	$h_{FE(2)}$	$V_{CE}=-4V$ $I_C=-15A$	15			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-15A$ $I_B=-1.5A$ $I_C=-25A$ $I_B=-5.0A$			-1.8 -4.0	V
Base-Emitter Voltage	$V_{BE(on)}$	$I_C=-15A$ $V_{CE}=-4V$ $I_C=-25A$ $V_{CE}=-4V$			-2.0 -4.0	V
Transition Frequency	f_T	$V_{CE}=-10V$ $I_C=-1A$ $f=1MHz$	3			MHz
Small Signal Current Gain	h_{fe}	$V_{CE}=-10V$ $I_C=-1A$ $f=1MHz$	25			pF

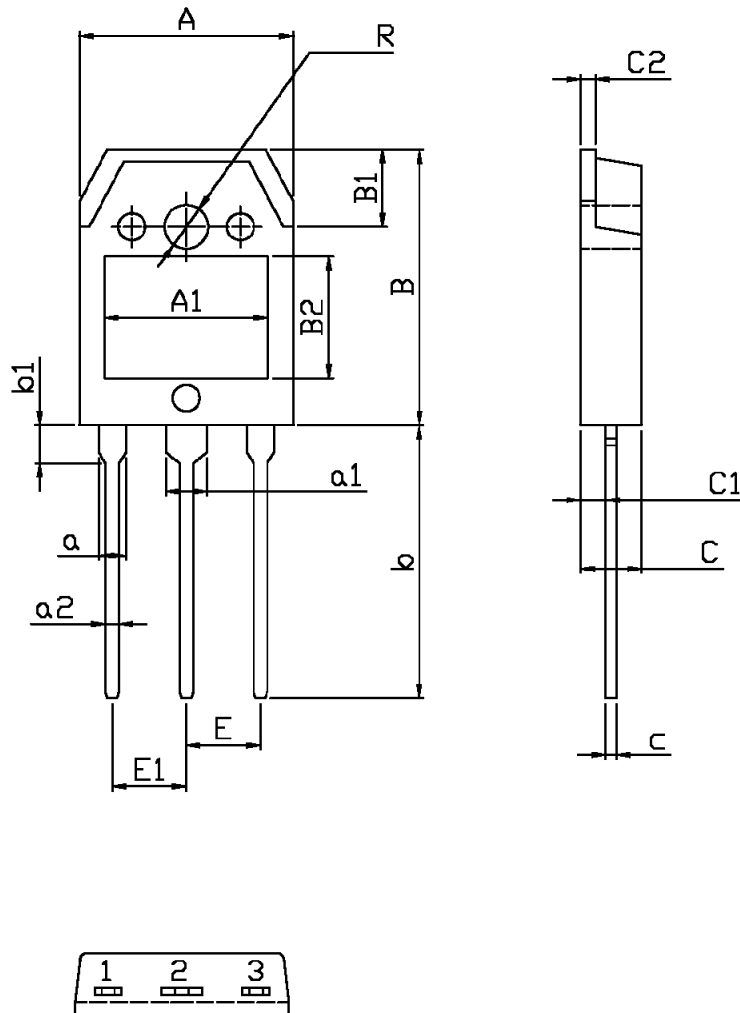
电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions

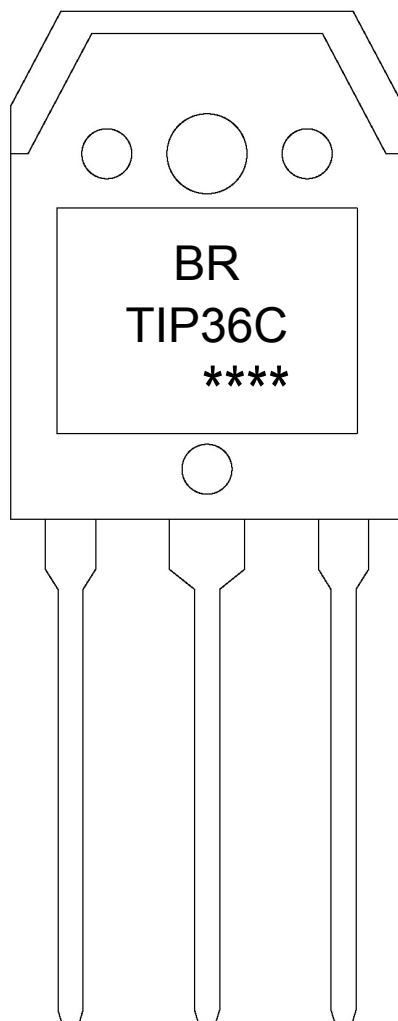
T0-3PH

Unit: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	4.6	5.0
B2	8.5		C1	2.2	2.6
A1	12.0		C2	1.4	1.6
b	19.6	20.6	c	0.5	0.7
b1	2.6	3.0			
a	1.8	2.2			
a1	2.8	3.2			

印章说明 / Marking Instructions



说明：

BR： 为公司代码

TIP36C： 为产品型号

****： 为生产批号代码，随生产批号变化。

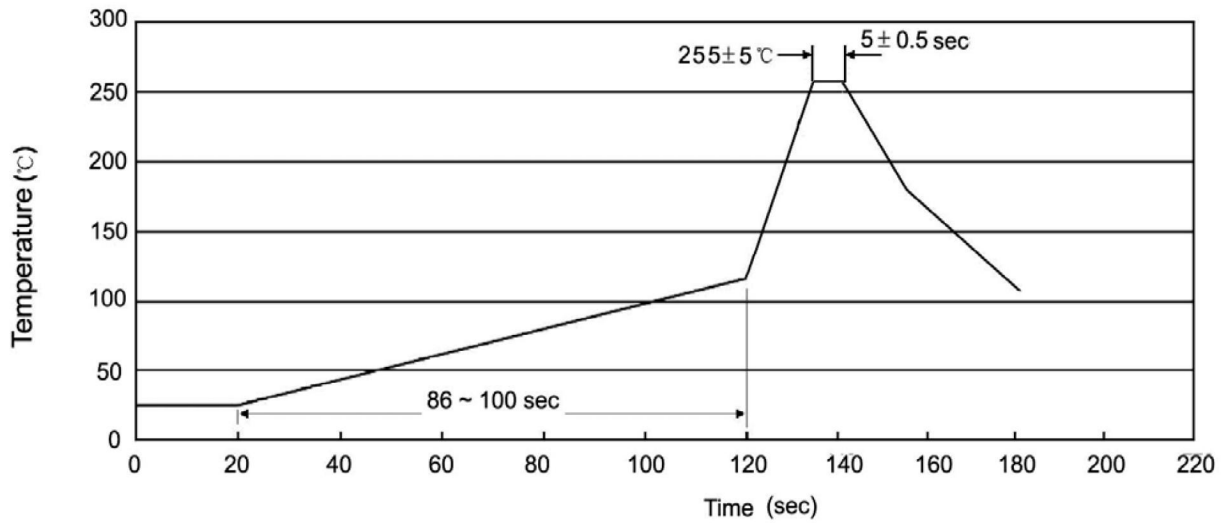
Note:

BR: Company Code.

TIP36C: 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.

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

使用说明 / Notices