

/ Descriptions

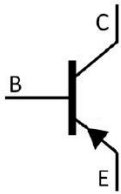
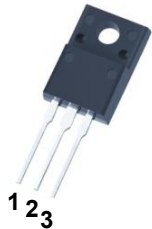
Silicon PNP transistor in a TO-220F Plastic Package.

/ Features

High V_{CEO} , large P_C .

/ Applications

Power amplifier, TV vertical deflection output.

/ Equivalent Circuit**/ Pinning**

PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	Q	P
h_{FE} Range	60~140	100~240

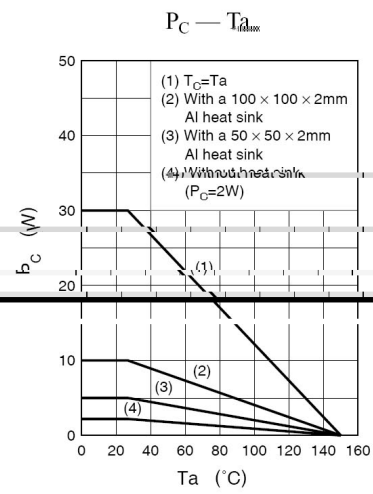
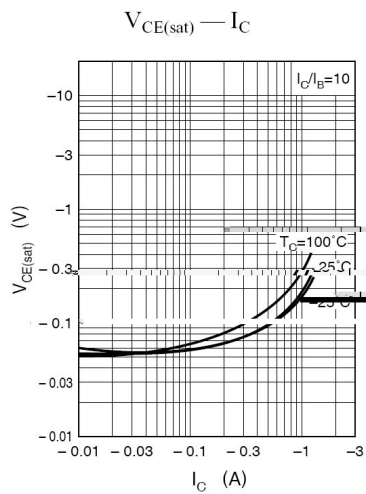
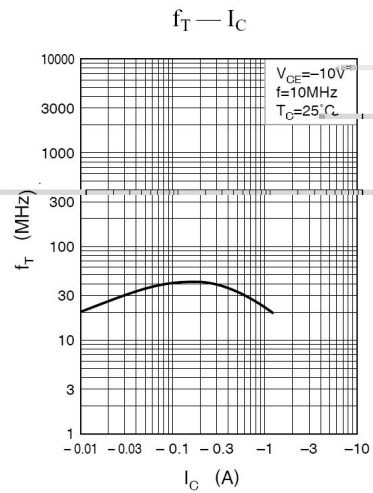
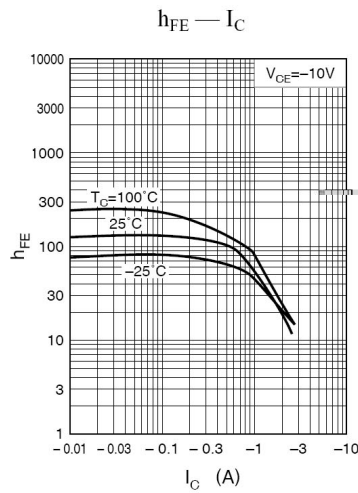
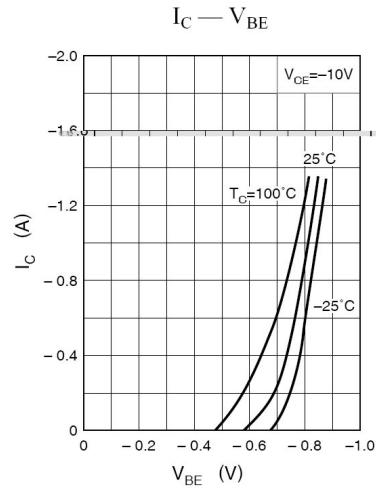
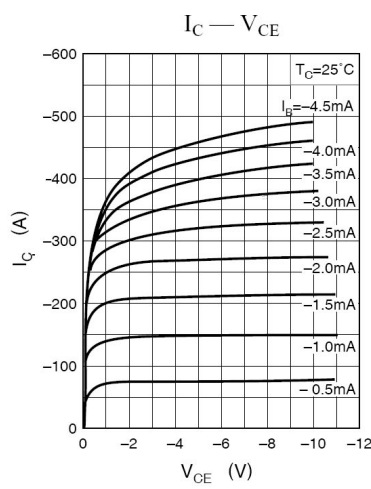
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-200	V
Collector to Emitter Voltage	V_{CEO}	-150	V
Emitter to Base Voltage	V_{EBO}	-6.0	V
Collector Current - Continuous	I_C	-2.0	A
Collector Current – Continuous(Pulse)	I_{CP}	-3.0	A
Collector Power Dissipation	P_C	2.0	W
Collector Power Dissipation	$P_C(T_c=25)$	30	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55~150	

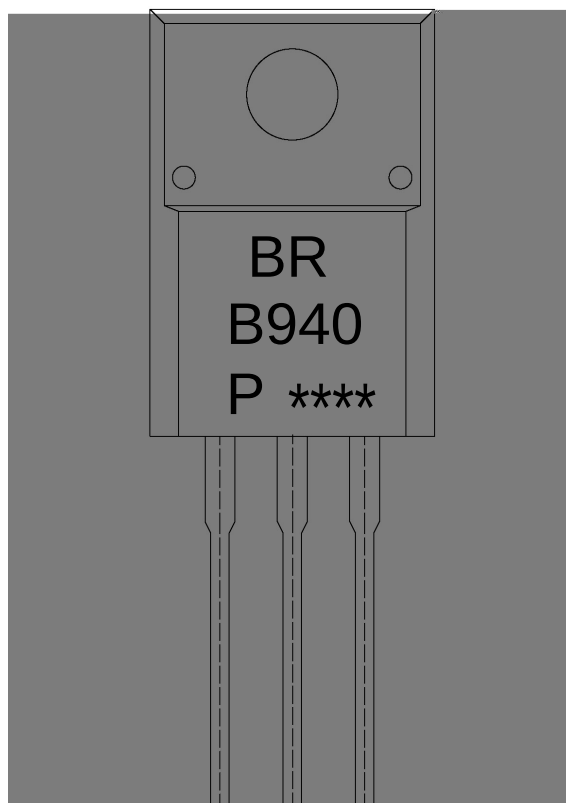
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=-500\text{ A}$ $I_E=0$	-200			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=-5.0\text{mA}$ $I_B=0$	-150			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=-500\text{ A}$ $I_C=0$	-6.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-200\text{V}$ $I_E=0$			-50	A
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=-4.0\text{V}$ $I_C=0$			-50	A
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-10\text{V}$ $I_C=-150\text{mA}$	60		240	
	$h_{FE(2)}$	$V_{CE}=-10\text{V}$ $I_C=-400\text{mA}$	50			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-500\text{mA}$ $I_B=-50\text{mA}$			-1.0	V
Base to Emitter Voltage	V_{BE}	$V_{CE}=-10\text{mA}$ $I_C=-400\text{mA}$			-1.0	V

/ **Electrical Characteristic Curve**



/ **Marking Instructions**



Note:

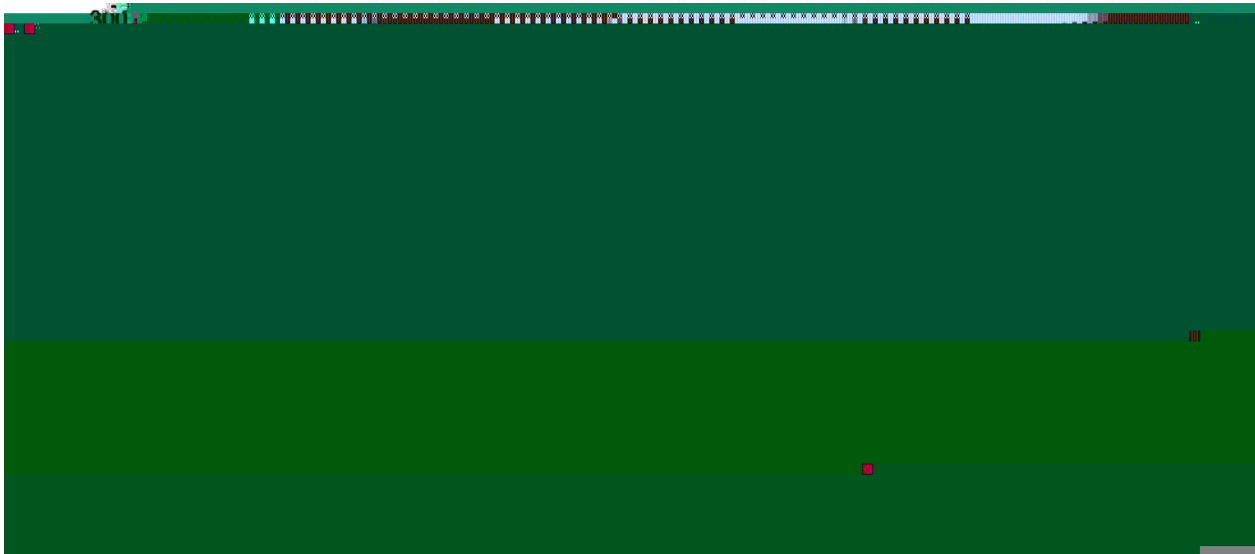
BR: Company Code.

B940: Product Type.

P: h_{FE} Classifications Symbol

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

() / Temperature Profile for Dip Soldering(Pb-Free)



Note:

- 1

25 150

60 90sec;

1.Preheating:25~150 , Time:60~90sec.
- 2

255 5

5 0.5sec;

2.Peak Temp.:255 5 , Duration:5 0.5sec.
- 3

2 10

/sec.

3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

270 5

10 1 sec.

Temp.:270±5

Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	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-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195