

/ Descriptions

Silicon PNP transistor in a TO-92 Plastic Package.

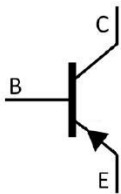
/ Features

High V_{EBO} , complementary pair with 2SD889.

/ Applications

Audio frequency amplifier.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	P	Q	R	S	T
h_{FE} Range	120~200	160~260	210~340	290~460	400~650

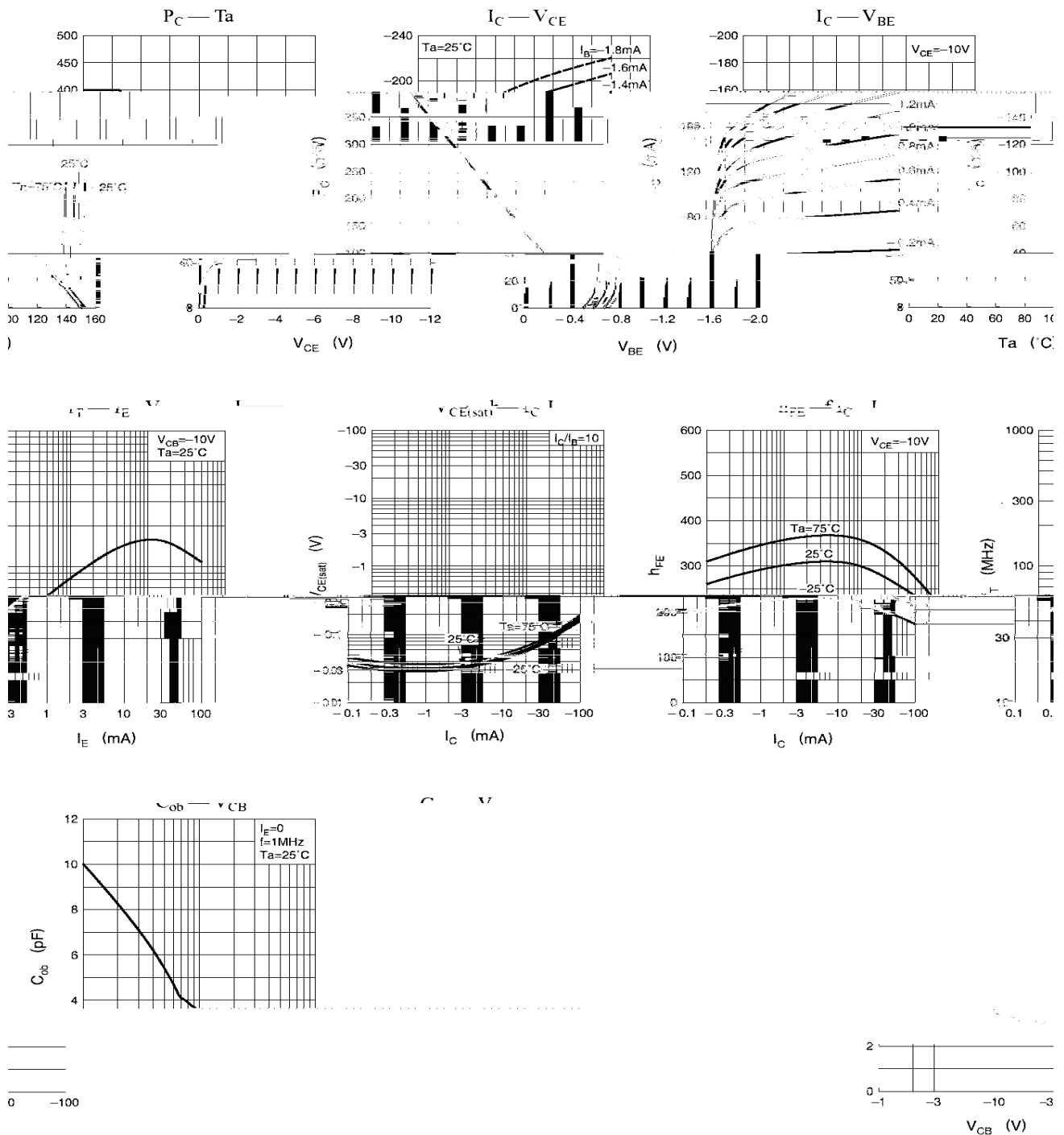
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-30	V
Collector to Emitter Voltage	V_{CEO}	-25	V
Emitter to Base Voltage	V_{EBO}	-8.0	V
Collector Current - Continuous	I_C	-100	mA
Collector Current – Continuous(Pulse)	I_{CP}	-200	mA
Collector Power Dissipation	P_C	400	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 150	°C

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=-10\text{ A}$ $I_E=0$	-30			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=-2.0\text{mA}$ $I_B=0$	-25			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=-10\text{ A}$ $I_C=0$	-8.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-10\text{V}$ $I_E=0$			-1.0	A
Collector Cut-Off Current	I_{CEO}	$V_{CE}=-20\text{V}$ $I_B=0$			-100	A
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-10\text{V}$ $I_C=-2.0\text{mA}$	120		650	
	$h_{FE(2)}$	$V_{CE}=-2.0\text{V}$ $I_C=-100\text{mA}$	80			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-100\text{mA}$ $I_B=-10\text{mA}$			-0.5	V
Transition Frequency	f_T	$V_{CE}=-10\text{V}$ $f=200\text{MHz}$ $I_C=-2.0\text{mA}$		150		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=-10\text{V}$ $f=1.0\text{MHz}$ $I_E=0$		4.0		pF

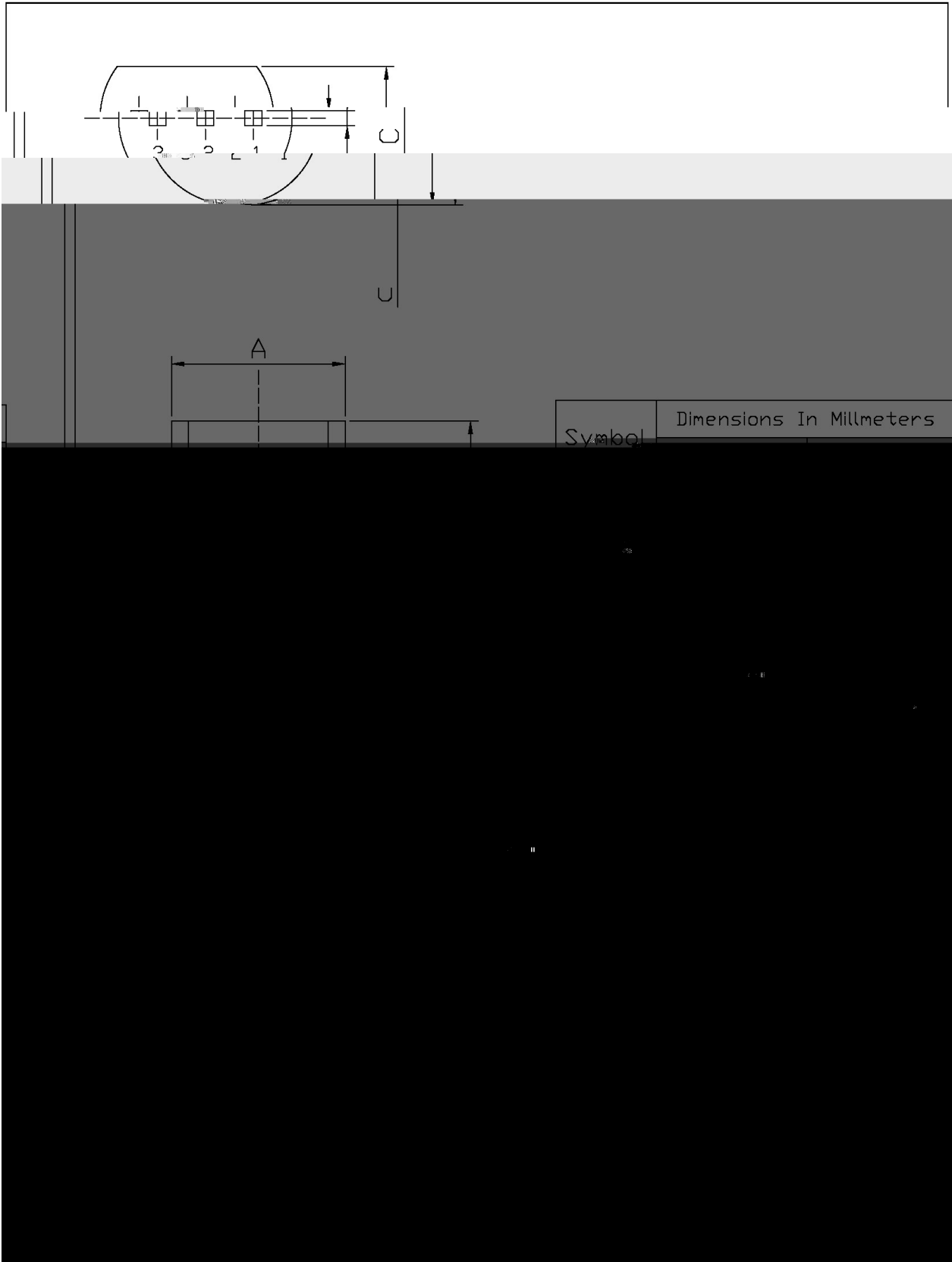
/ Electrical Characteristic Curve



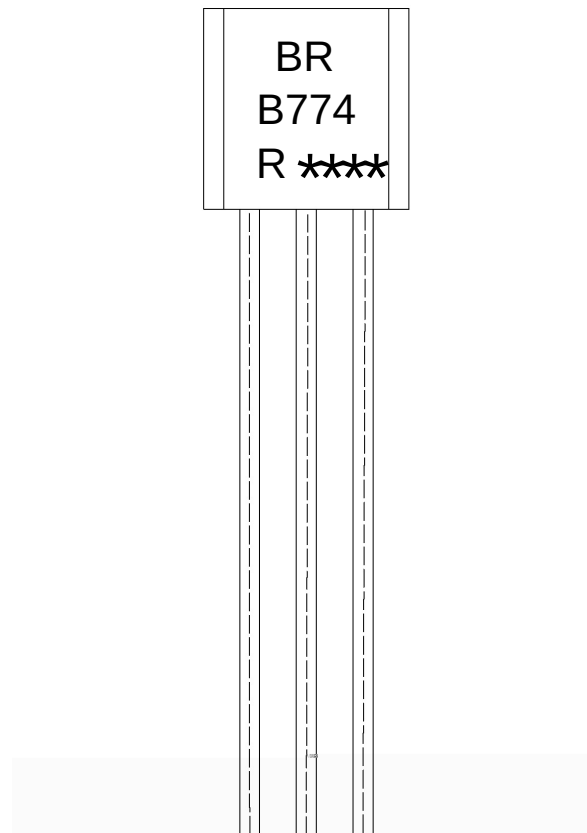
/ Package Dimensions

TO-92

Unit: mm



/ Marking Instructions



h_{FE}

Note:

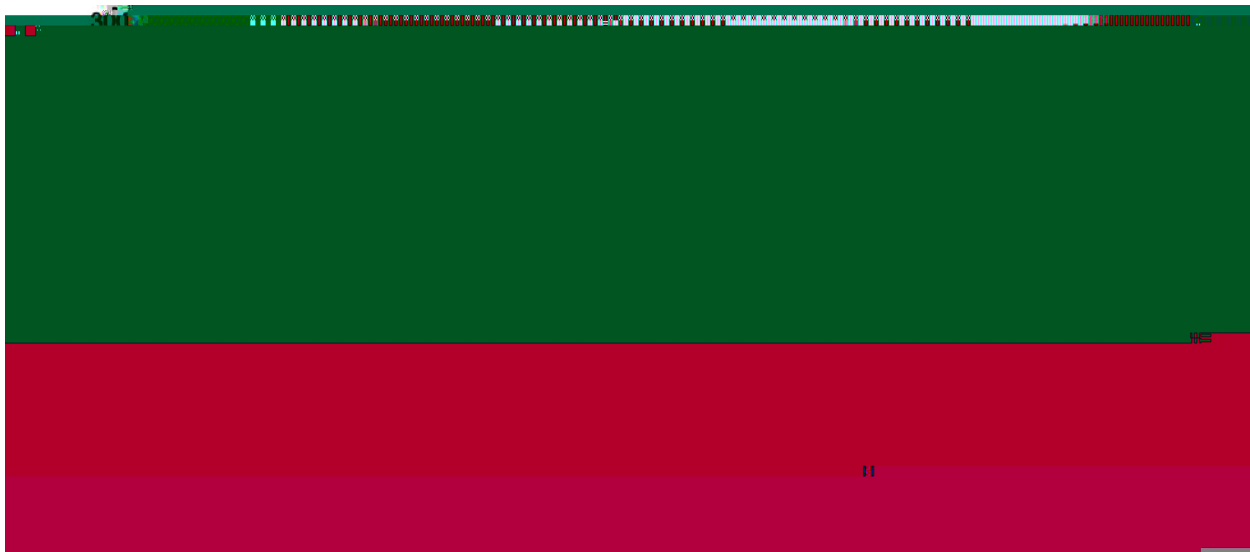
BR: Company Code.

B774: Product Type.

R: 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: 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

/ 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	