

/ Descriptions

Silicon NPN transistor in a TO-220 Plastic Package.

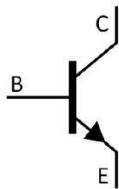
/ Features

Low saturation voltage, excellent h_{FE} linearity and high h_{FE} .

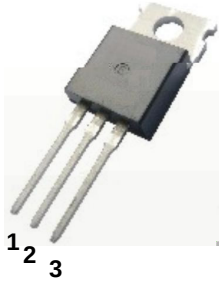
/ Applications

Output stage of 3 watts audio amplifier, voltage regulator, DC-DC converter and relay driver.

/ Equivalent Circuit



/ Pinning



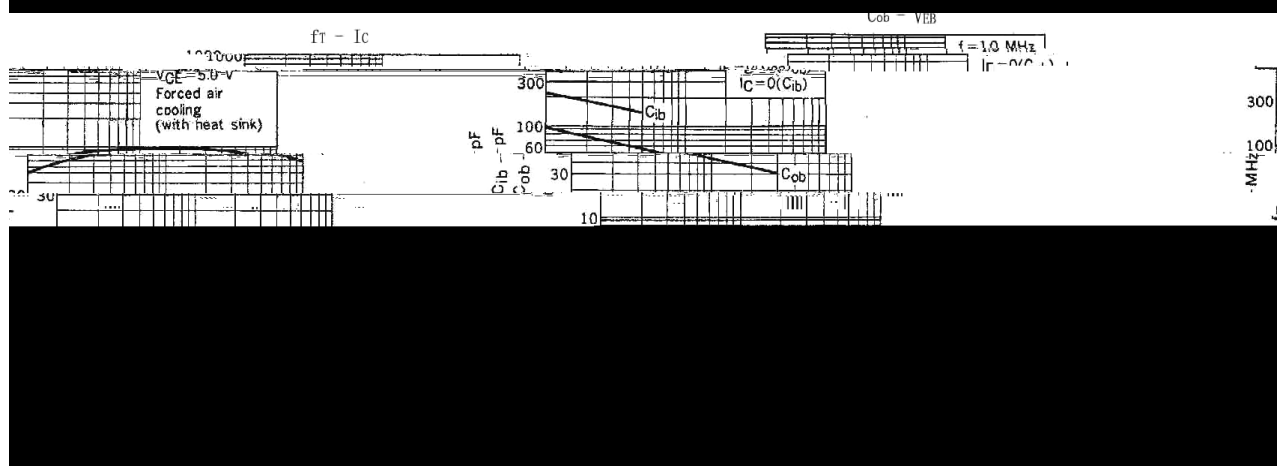
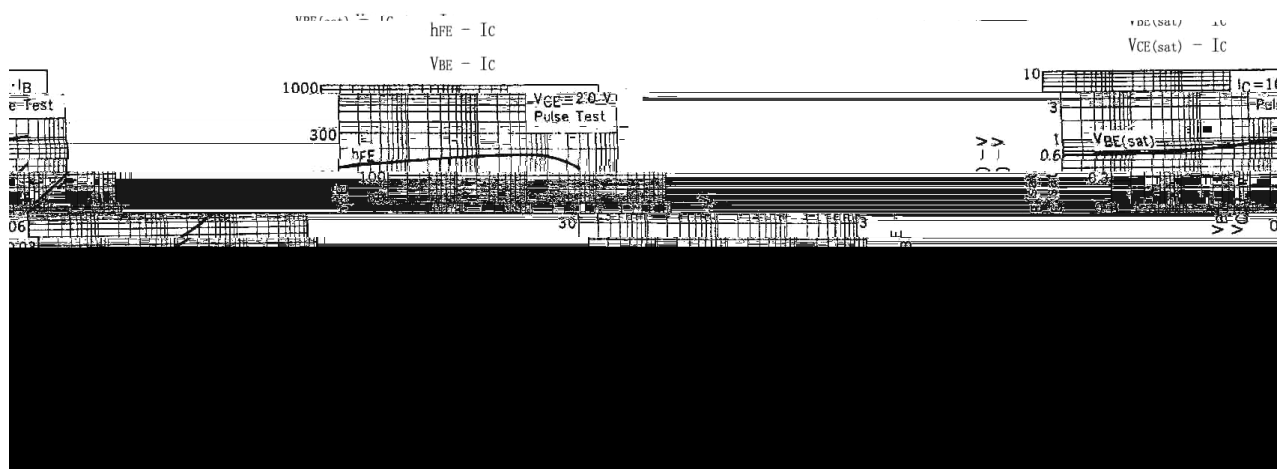
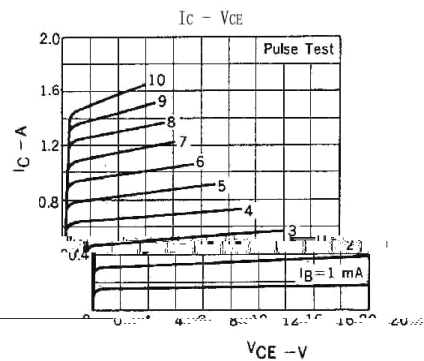
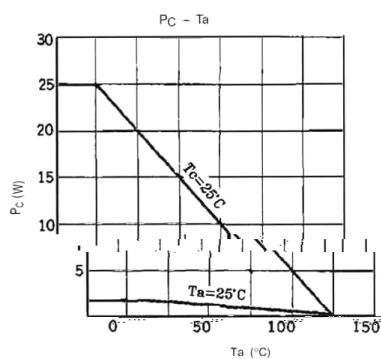
PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

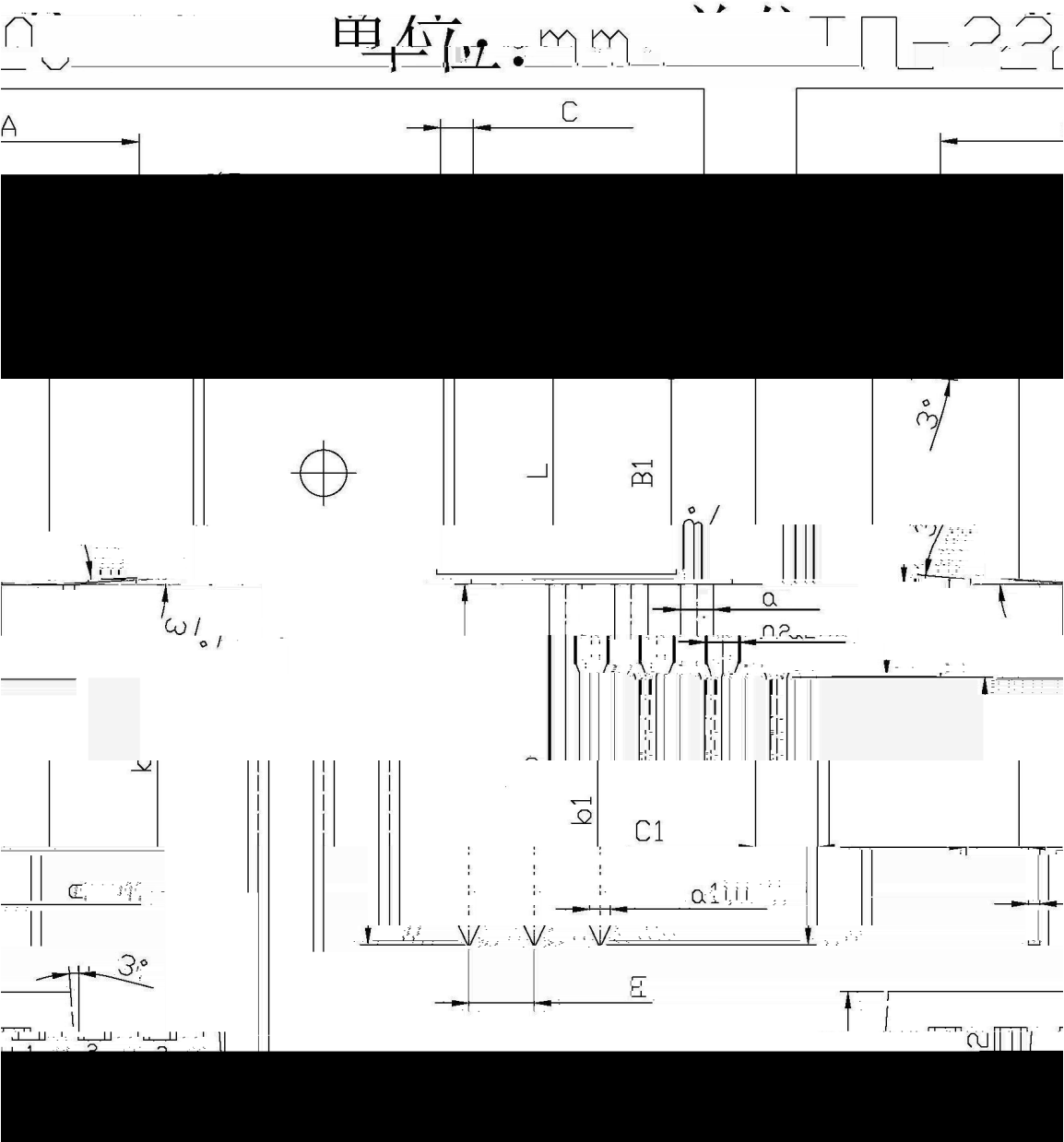
h_{FE} Classifications Symbol	R	Q	P	E
h_{FE} Range	60 120	100 200	160 320	200 400

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	40	V
Collector to Emitter Voltage	V_{CEO}	30	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	3.0	A
Collector Power Dissipation	P_C	2.0	W
	$P_C(T_C=25^\circ\text{C})$	25	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristic Curve

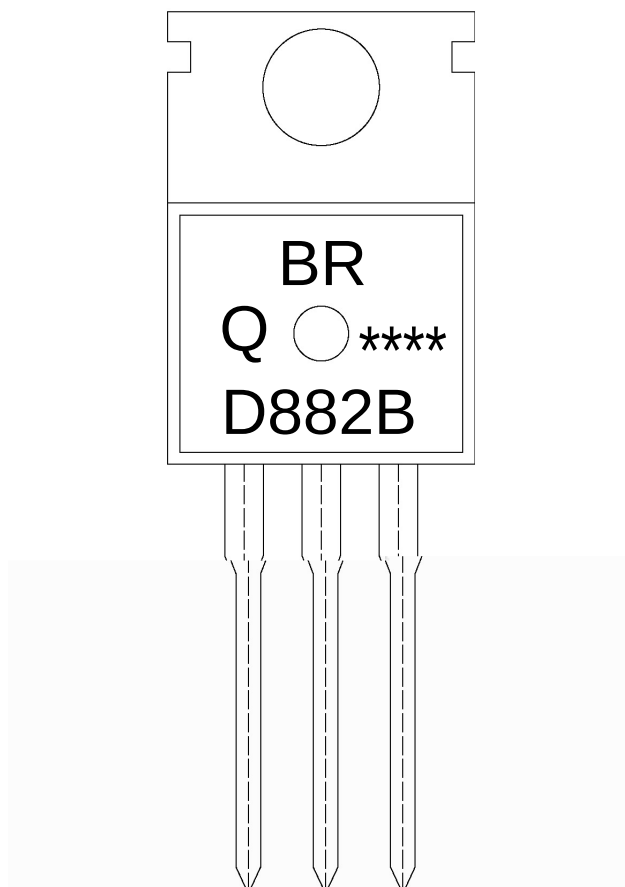


/ Package Dimensions



Symbol	Dimensions in Millimeters		Symbol	Dimensions in Millimeters	
	Min	Max		Min	Max
A	9.8	10.2	C	1.2	1.4
B1	9.0	9.4	E	1.2	1.4
C1	1.2	1.4	L	0.1	0.2
E	1.2	1.4	a	0.1	0.2
L	0.1	0.2	a1	0.1	0.2
a	0.1	0.2	b1	0.1	0.2
a1	0.1	0.2			
b1	0.1	0.2			

/ Marking Instructions



BR

D882B

h_{FE}

Note:

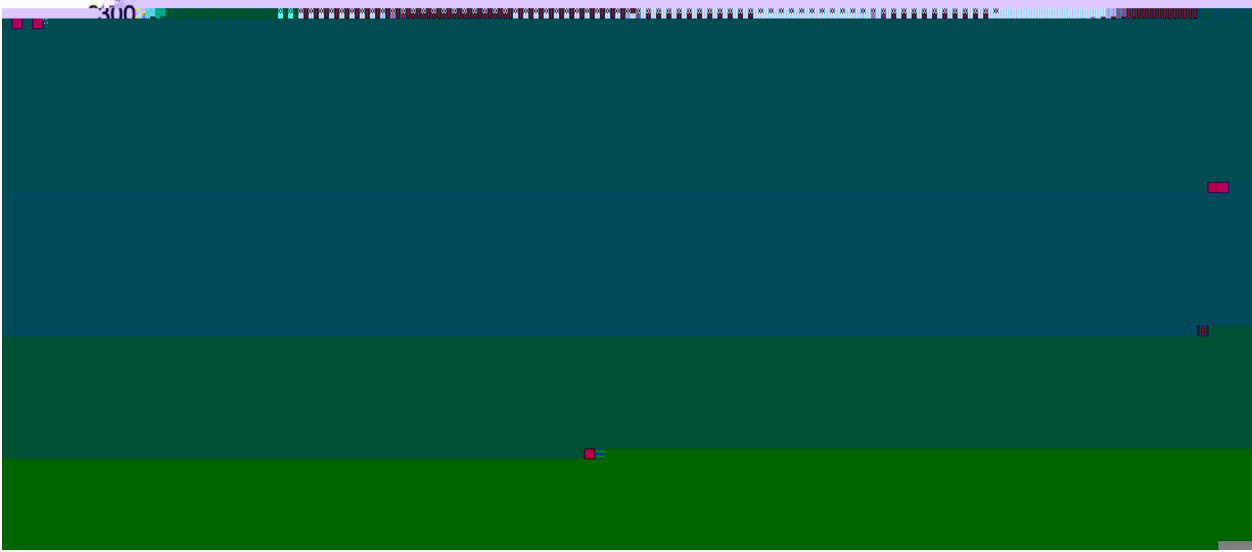
BR: Company Code

D882B: Product Type.

Q: 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;
- 2

255 5

5 0.5sec;
- 3

2 10

/sec.
- 1.Preheating:25~150

,

Time:60~90sec.
- 2.Peak Temp.:255 5

,

Duration:5 0.5sec.
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	Units					Dimension (unit mm ³)		
	Units/Bag	Bags/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Bag	Inner Box	Outer Box