

/ Descriptions

Silicon NPN transistor in a TO-220 Plastic Package.

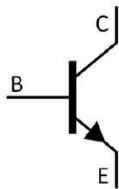
/ Features

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

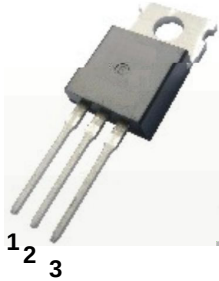
/ Applications

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

/ Equivalent Circuit



/ Pinning



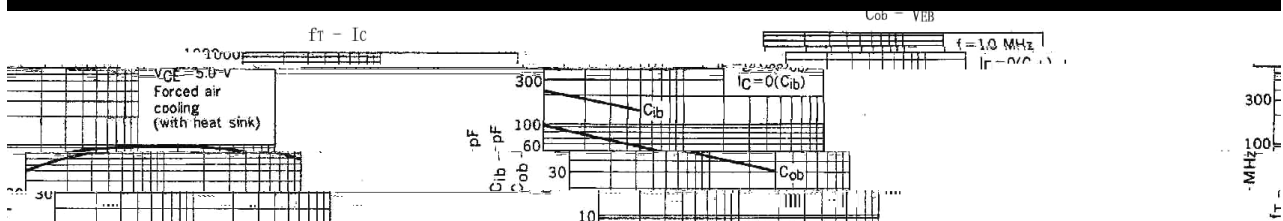
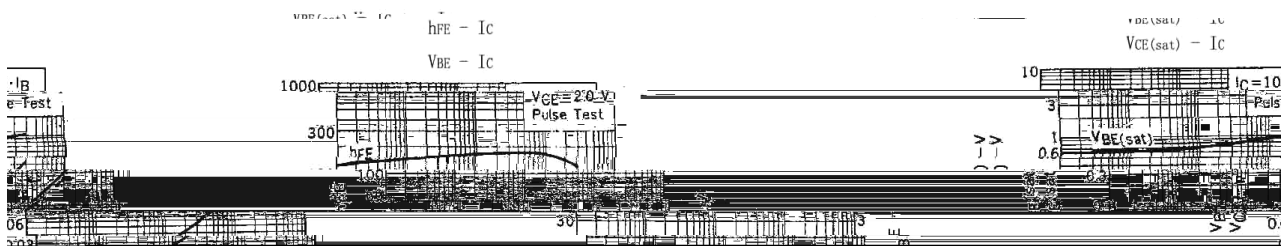
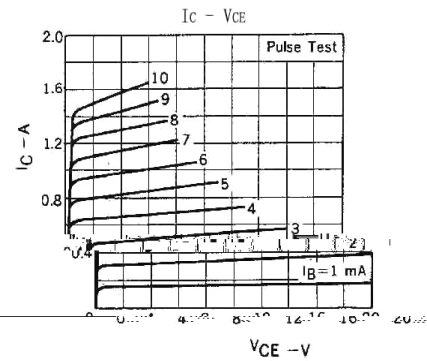
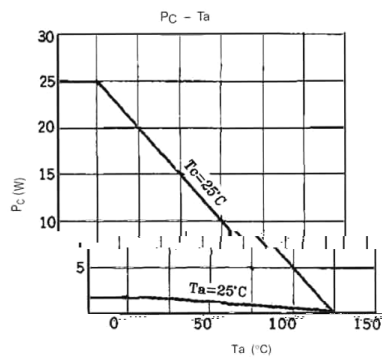
PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

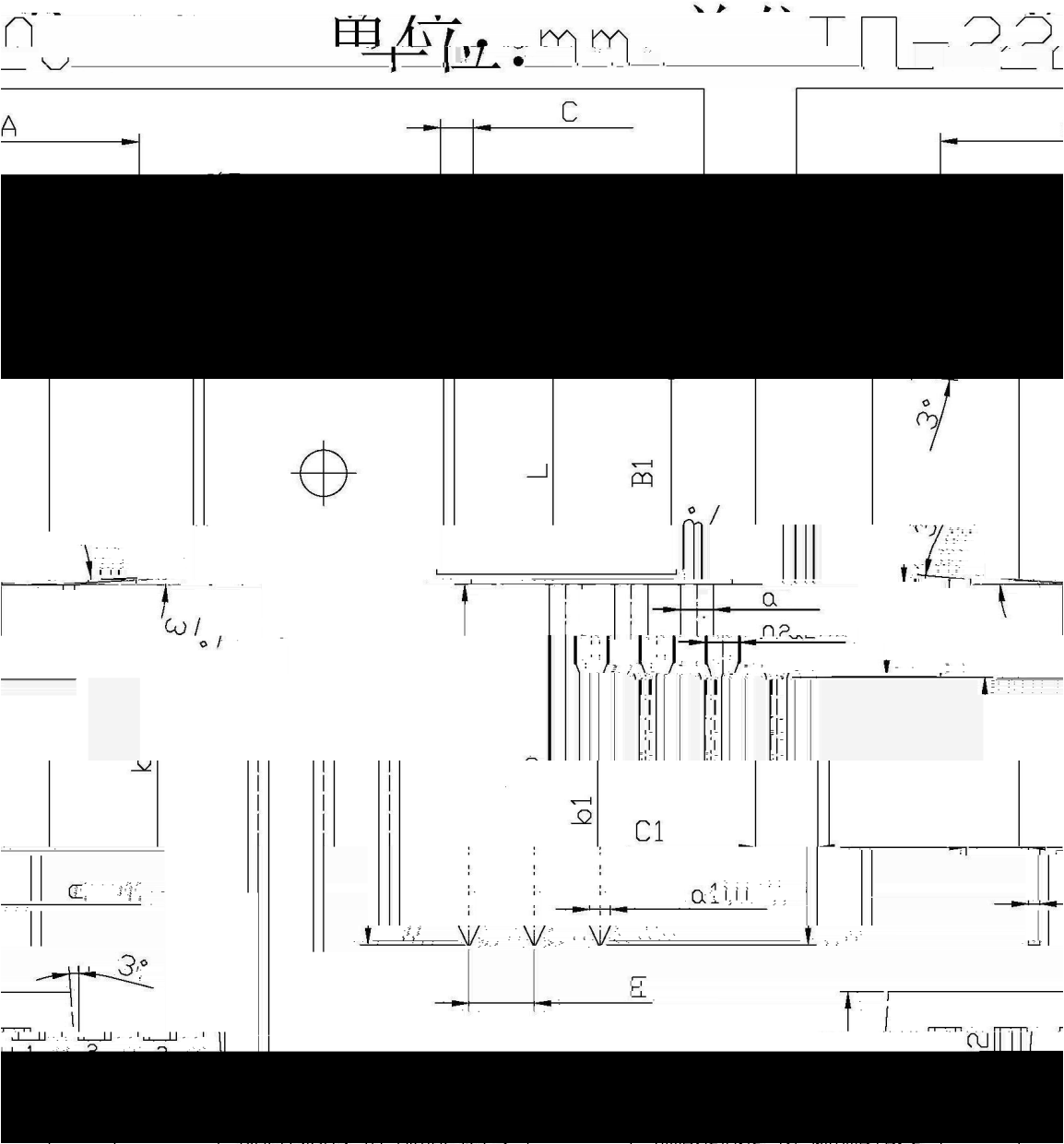
h_{FE} Classifications Symbol	R	Q	P	E
h_{FE} Range	60 120	100 200	160 320	200 400

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

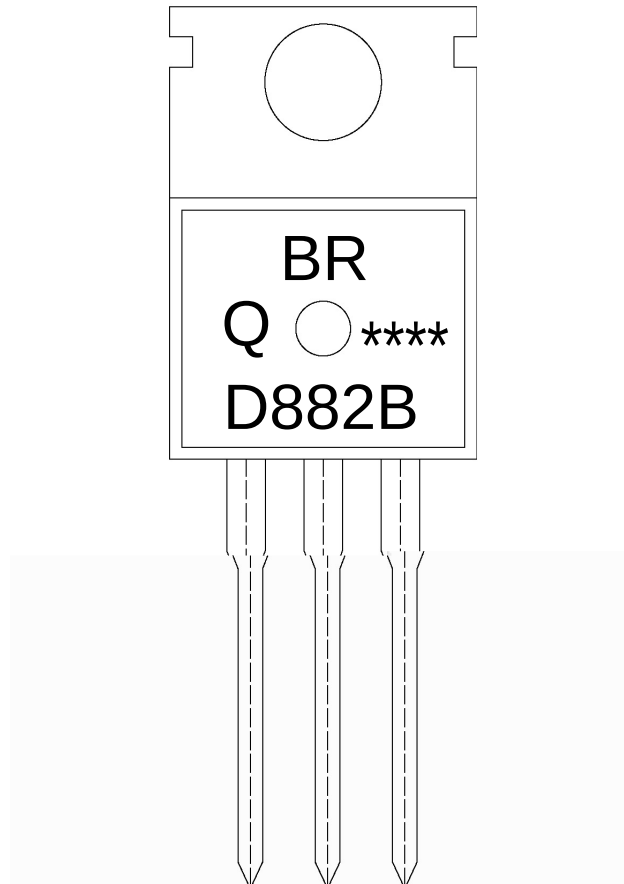


/ Package Dimensions



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	C1	1.2	1.4
E	1.2	1.4	E	1.2	1.4
L	1.2	1.4	L	1.2	1.4
a	0.5	0.6	a1	0.5	0.6
b1	0.5	0.6	b1	0.5	0.6

/ Marking Instructions



BR

D882B

h_{FE}

Note:

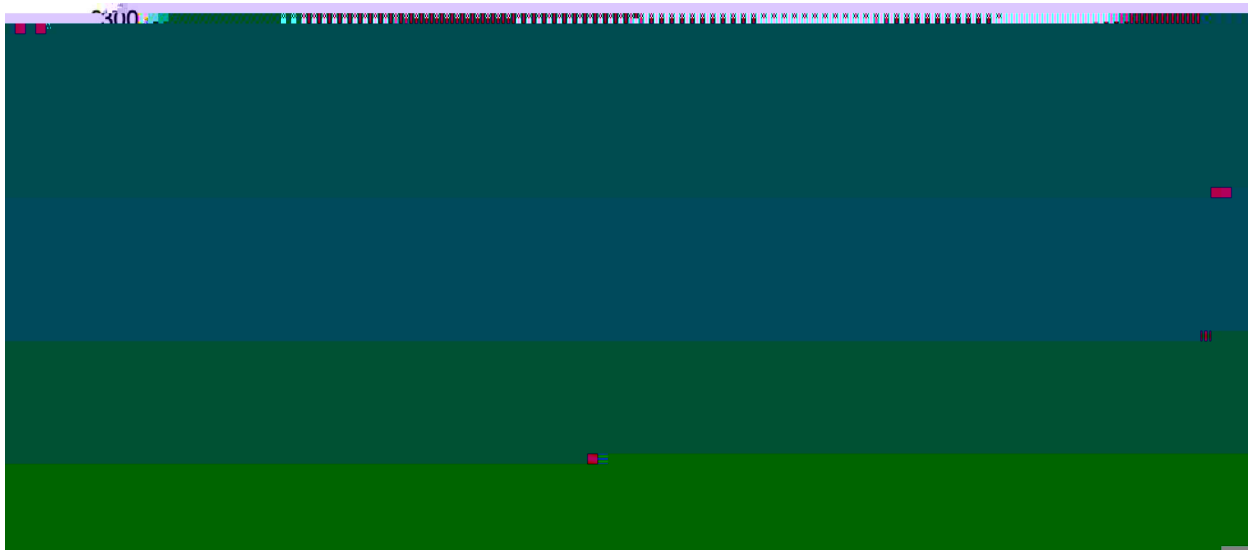
BR: Company Code

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; | 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	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