

## / Descriptions

TO-92          NPN          Silicon NPN transistor in a TO-92 Plastic Package.

## / Features

PC, IC , L8550

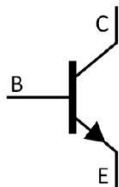
High  $P_C$  and  $I_C$ , complementary pair with L8550.

## / Applications

2W

2W output amplifier of portable radios in class B push-pull operation.

## / Equivalent Circuit



## / Pinning



1 2 3

PIN1   Collector          PIN 2   Base          PIN 3   Emitter

## / $h_{FE}$ Classifications & Marking

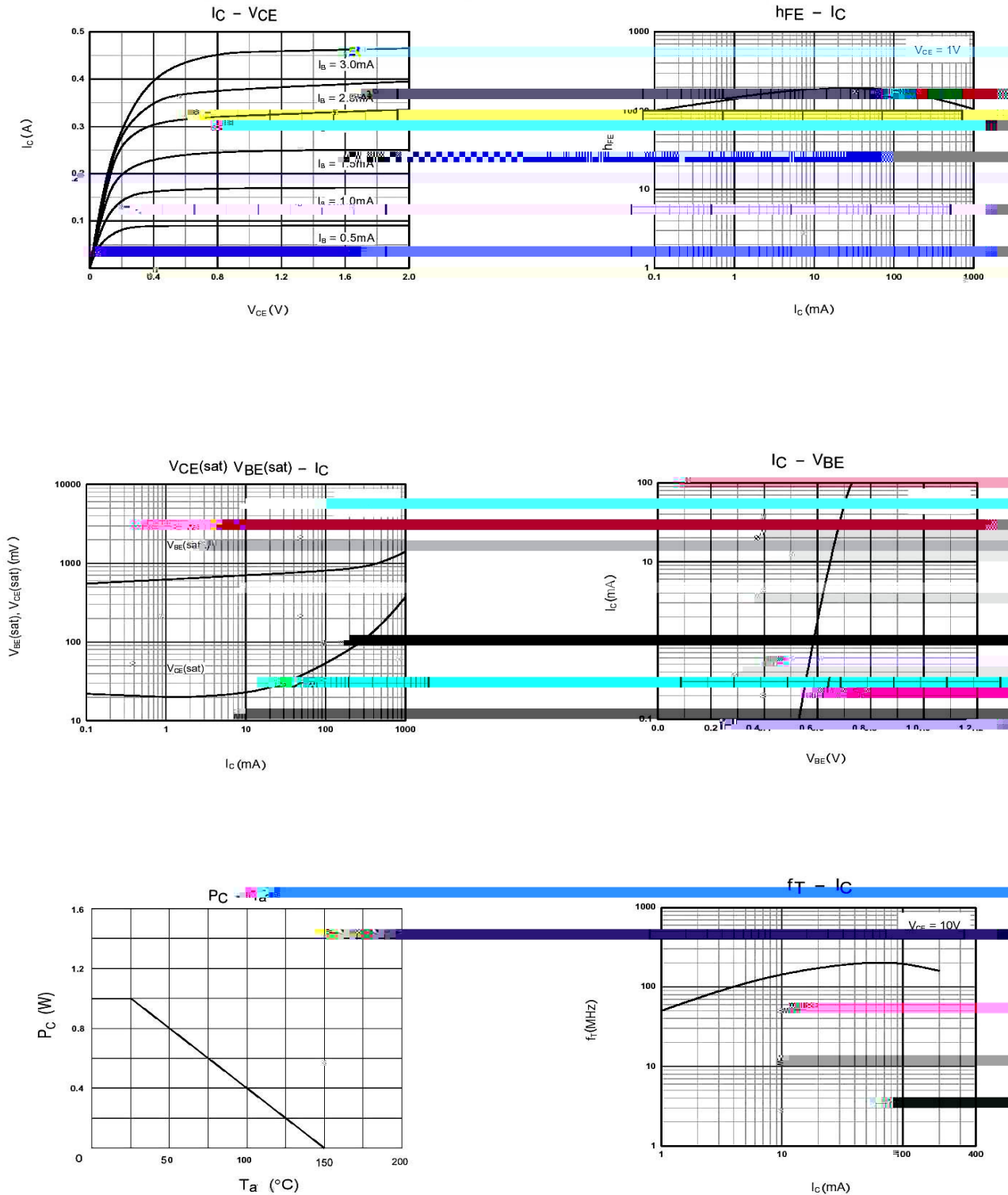
| $h_{FE}$ Classifications<br>Symbol | B      | C       | D       |
|------------------------------------|--------|---------|---------|
| $h_{FE}$ Range                     | 85~160 | 120~200 | 160~300 |

# L8050

Rev.E Mar.-2016

| Parameter                      | Symbol    | Rating | Unit |
|--------------------------------|-----------|--------|------|
| Collector to Base Voltage      | $V_{CBO}$ | 30     | V    |
| Collector to Emitter Voltage   | $V_{CEO}$ | 20     | V    |
| Emitter to Base Voltage        | $V_{EBO}$ | 6.0    | V    |
| Collector Current - Continuous | $I_C$     | 1.5    | A    |
| Base Current                   | $I_B$     | 0.5    | A    |
| Collector Power Dissipation    | $P_C$     | 1.0    | W    |
| Junction Temperature           | $T_J$     | 150    |      |
| Storage Temperature Range      | T         |        |      |

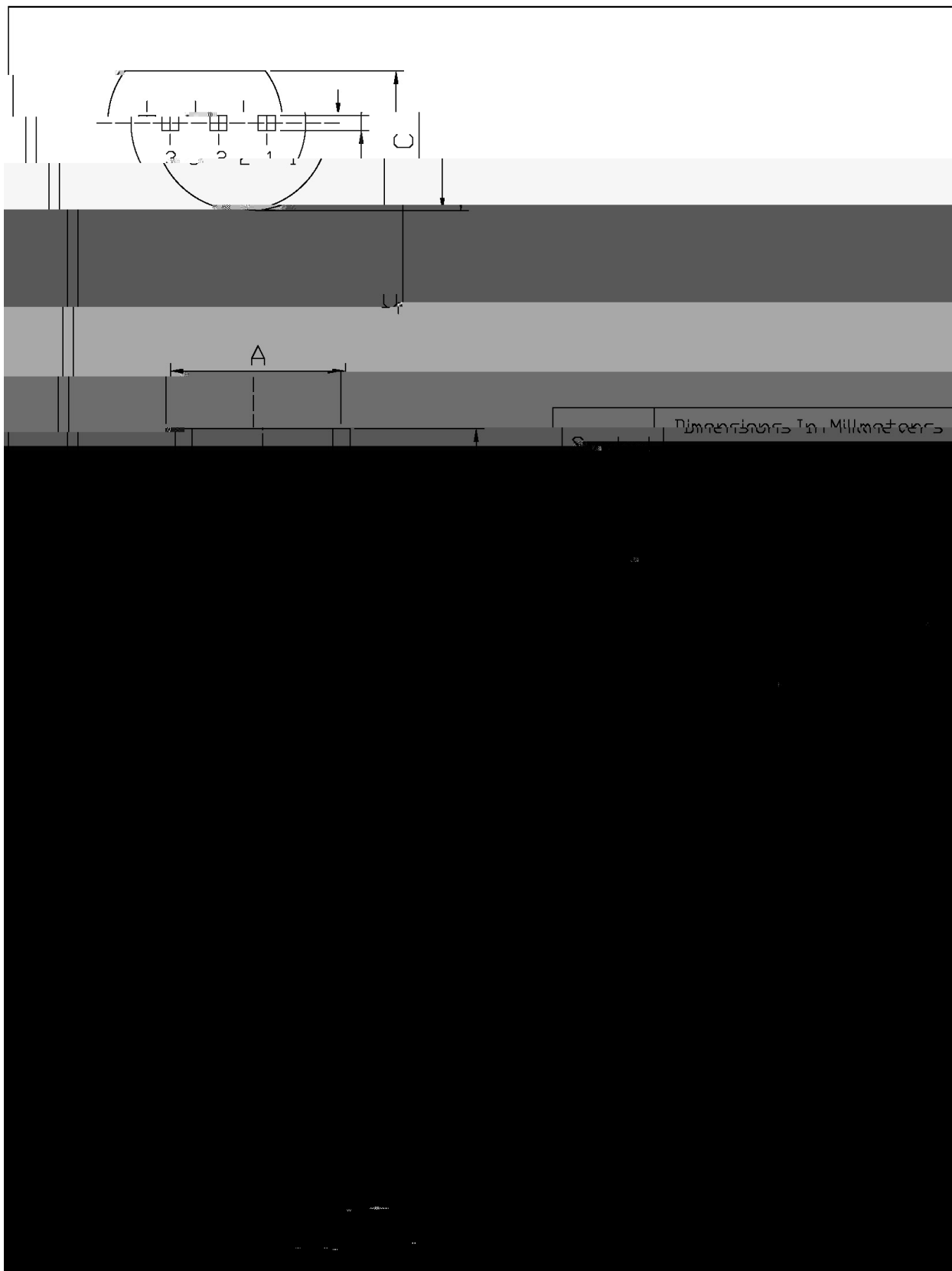
**/ Electrical Characteristic Curve**



/ Package Dimensions

TO-92

Unit: mm






**( ) / 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 mm3) |             |             |
|--------------|----------------|---------------------|----------------------|----------------------------|----------------------|----------------------|-------------|-------------|
|              | Units/Bag<br>/ | Bags/Inner Box<br>/ | Units/Inner Box<br>/ | Inner Boxes/Outer Box<br>/ | Units/Outer Box<br>/ | Bag                  | Inner Box   | Outer Box   |
| 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 | Units           |                     |                     |                            |                      | Dimension (unit mm3) |             |
|--------------|-----------------|---------------------|---------------------|----------------------------|----------------------|----------------------|-------------|
|              | Units/tape<br>/ | Tape/Inner Box<br>/ | Rows/Inner Box<br>/ | Inner Boxes/Outer Box<br>/ | Units/Outer Box<br>/ | Inner Box            | Outer Box   |
| TO-92        | 3,000           | 1                   | 120                 | 10                         | 30,000               | 328×230×42           | 480×346×235 |
|              |                 |                     |                     |                            |                      |                      | 547×407×268 |

**/ Notices**