

/ Descriptions

SOT-89 PNP Silicon PNP transistor in a SOT-89 Plastic Package.

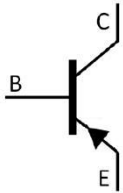
/ Features

KTC3205T
Complementary pair with KTC3205T.

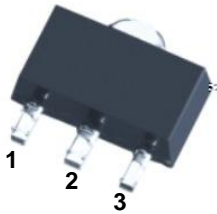
/ Applications

High current applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

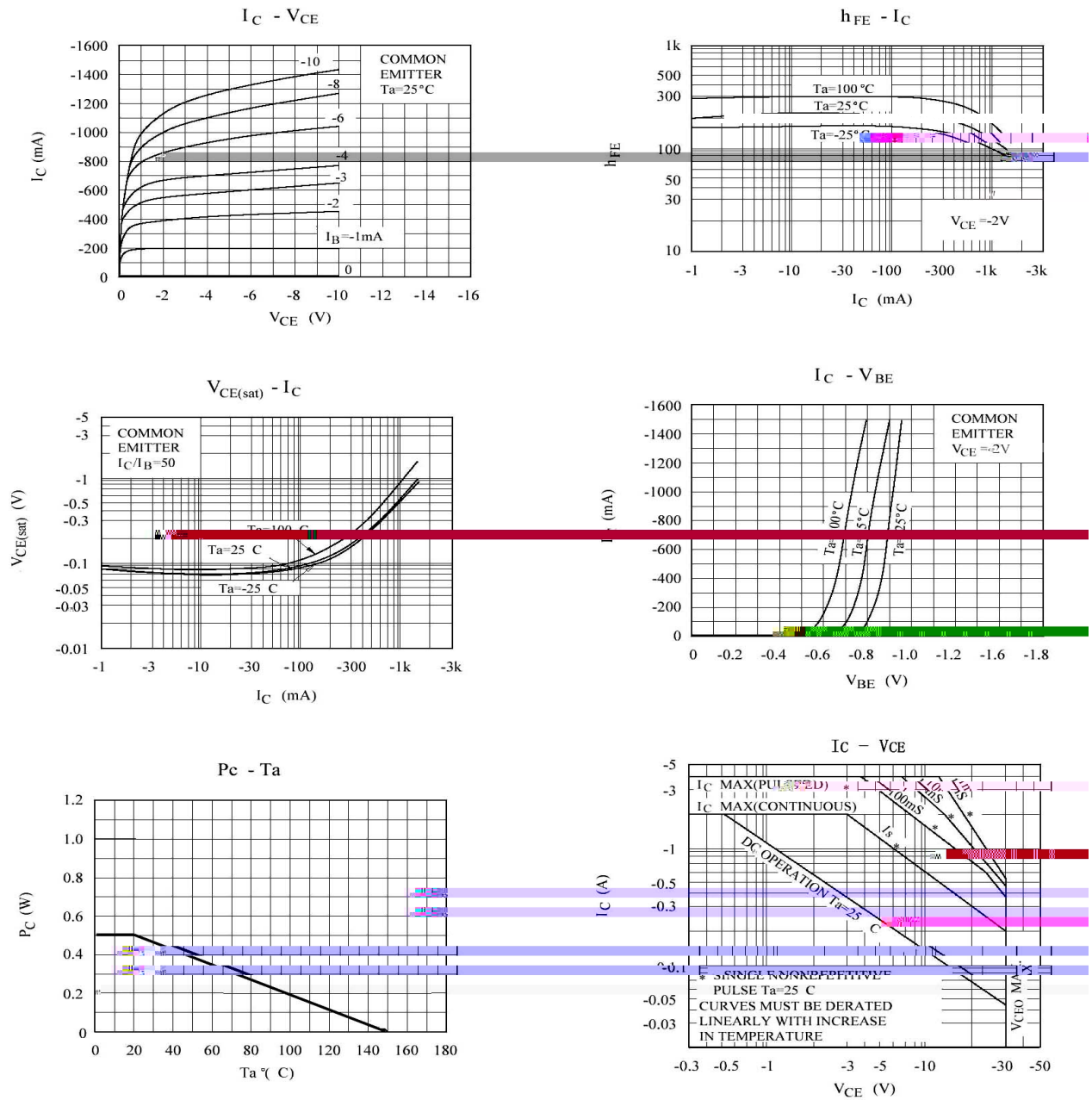
/ Marking

| | | |
|------------------------------------|-------------------|-------------------|
| h_{FE} Classifications Symbol | O | Y |
| h_{FE} Range | 100~200 | 160~320 |
| Marking | HP3O [*] | HP3Y [*] |

| Parameter | Symbol | Rating | Unit |
|--------------------------------|-----------|---------|------|
| Collector to Base Voltage | V_{CBO} | -30 | V |
| Collector to Emitter Voltage | V_{CEO} | -30 | V |
| Emitter to Base Voltage | V_{EBO} | -5.0 | V |
| Collector Current - Continuous | I_C | -2.0 | A |
| Collector Emitter – Continuous | I_E | 2.0 | A |
| Collector Power Dissipation | P_C | 0.5 | W |
| Junction Temperature | T_j | 150 | °C |
| Storage Temperature Range | T_{stg} | -55~150 | °C |

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|---------------|-------------------------------------|------|-----|------|------|
| Collector to Emitter Breakdown Voltage | V_{CEO} | $I_C=-10mA$ $I_B=0$ | -30 | | | V |
| Emitter to Base Breakdown Voltage | V_{EBO} | $I_E=-1.0mA$ $I_C=0$ | -5.0 | | | V |
| Collector Cut-Off Current | I_{CBO} | $V_{CB}=-30V$ $I_E=0$ | | | -0.1 | A |
| Emitter Base Cut-Off Current | I_{EBO} | $V_{EB}=-5.0V$ $I_C=0$ | | | -0.1 | A |
| DC Current Gain | h_{FE} | $V_{CE}=-2.0V$ $I_C=-500mA$ | 100 | | 320 | |
| Collector to Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=-1.5A$ $I_B=-0.03A$ | | | -2.0 | V |
| Base to Emitter Voltage | V_{BE} | $V_{CE}=-2.0V$ $I_C=-500mA$ | | | -1.0 | V |
| Transition Frequency | f_T | $V_{CE}=-2.0V$ $I_C=-500mA$ | | 120 | | MHz |
| Collector Output Capacitance | C_{ob} | $V_{CB}=-10V$ $f=1.0MHz$ $I_E=0$ | | 48 | | pF |

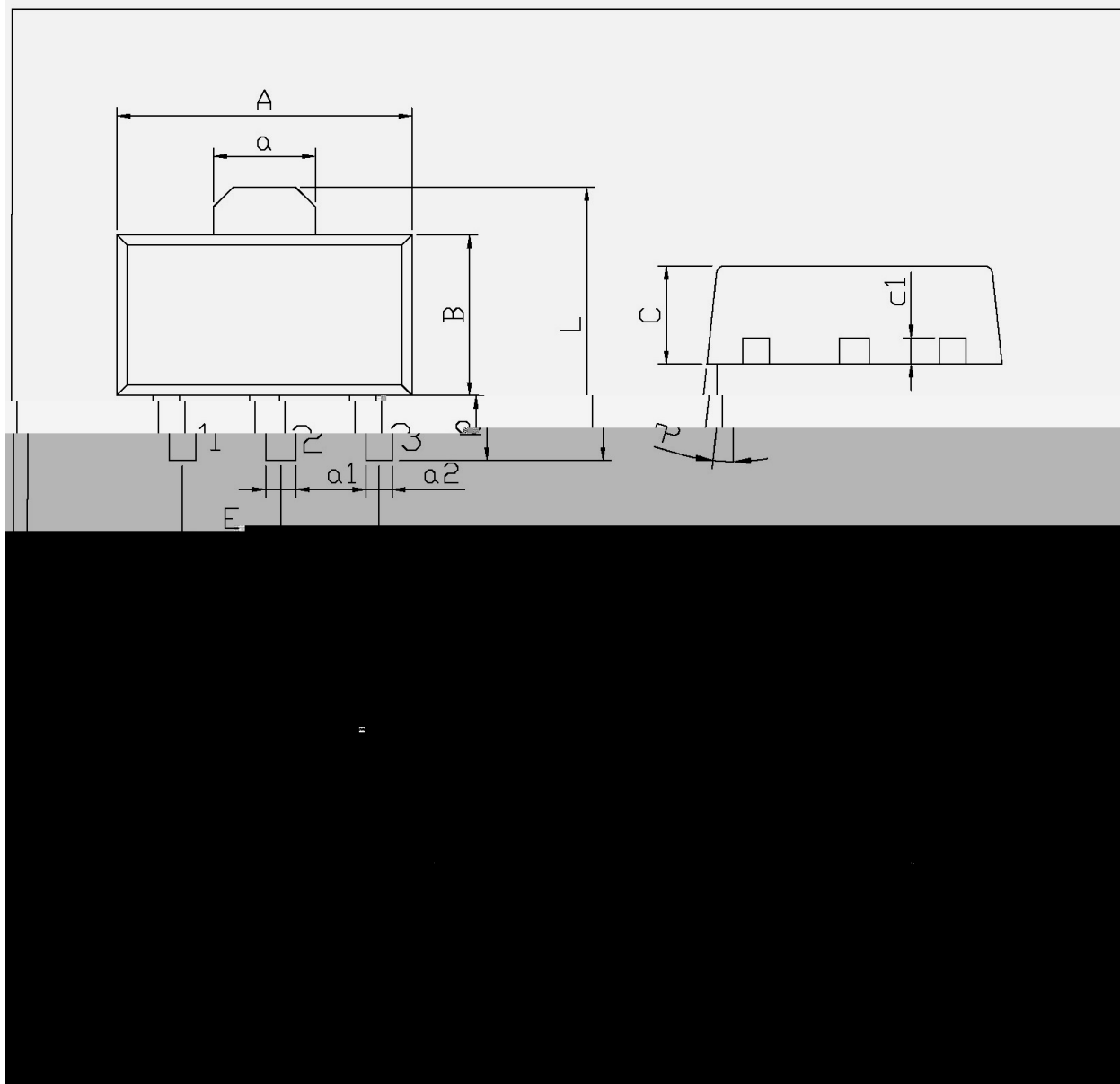
/ Electrical Characteristic Curve



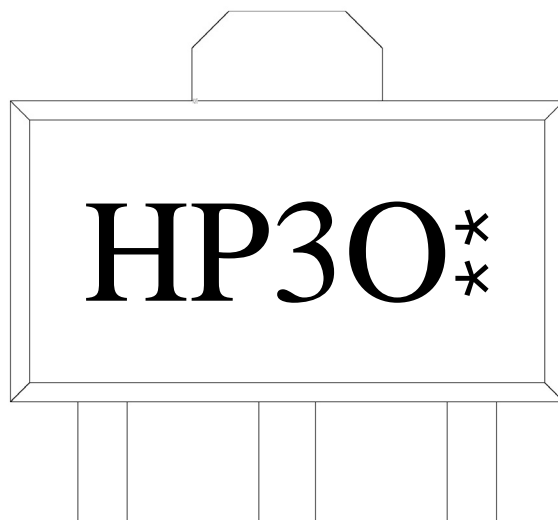
/ Package Dimensions

SOT-89

单位: mm



/ Marking Instructions



H

P3

O h_{FE}

**

Note:

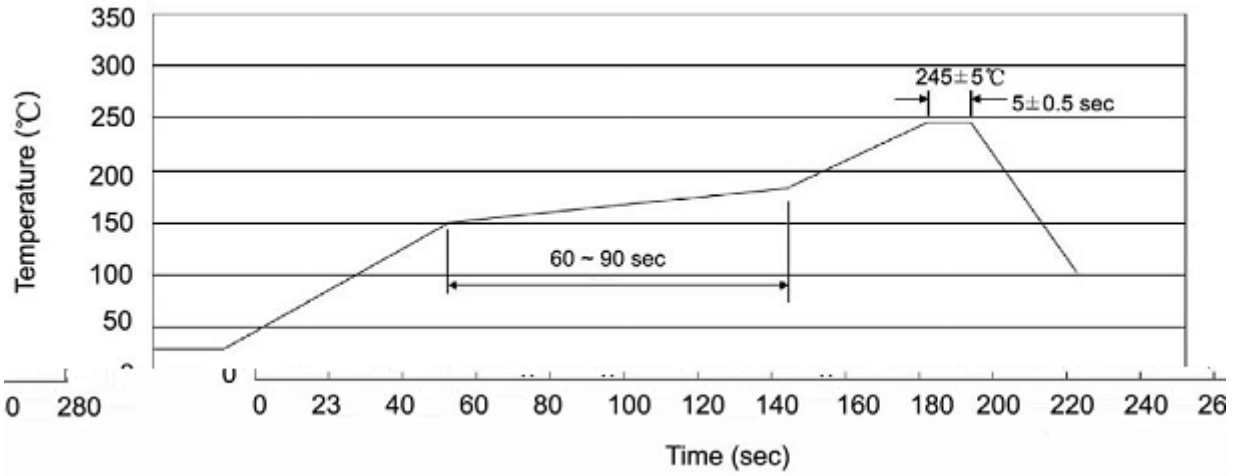
H: Company Code.

P3: Product Type.

O h_{FE} Classifications Symbol

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

() / Resistance to Soldering Heat Test Conditions



Note:

- | | | | | | |
|---|-------|-----|----|-----------|---|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 245±5 | | | 5±0.5sec; | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | | | 2 | 10 /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5°C Time:10±1 sec

/ Packaging SPEC.

/ REEL

| Package Type 封装形式 | Units 包装数量 | | | | | Dimension 包装尺寸 (unit: mm ³) | | |
|----------------------|--------------------|-------------------------|------------------------|------------------------------|------------------------|---|-------------|-------------|
| | Units/Reel 只/卷盘 | Reels/Inner Box 卷盘/盒 | Units/Inner Box 只/盒 | Inner Boxes/Outer Box 盒/箱 | Units/Outer Box 只/箱 | Reel | Inner Box 盒 | Outer Box 箱 |
| SOT-89 | 1,000 | 7 | 7,000 | 8 | 56,000 | 7" ×12 | 180×120×180 | 385×257×392 |

/ Notices