## / Descriptions

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

## / Features

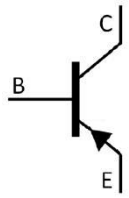
KTC3205T

Complementary pair with KTC3205T.

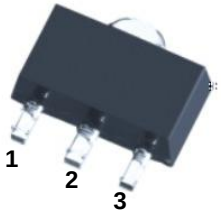
## / Applications

High current applications.

## / Equivalent Circuit




## / Pinning




PIN1 Base PIN 2 Collector PIN 3 Emitter

## / Marking

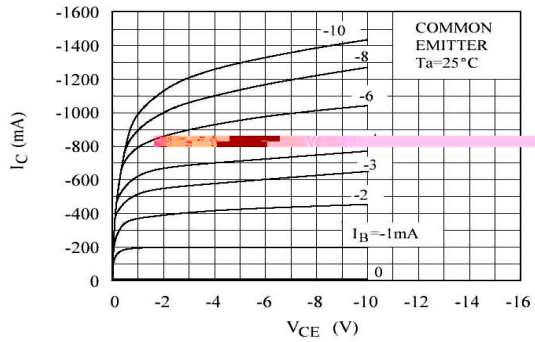
| $h_{FE}$ Classifications Symbol | O | Y |
|---|---|---|
| $h_{FE}$ Range | 100～200 | 160～320 |
| Marking | HP3O | HP3Y |

| 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 | ℃ |
| Storage Temperature Range | $T_{stg}$ | -55～150 | ℃ |

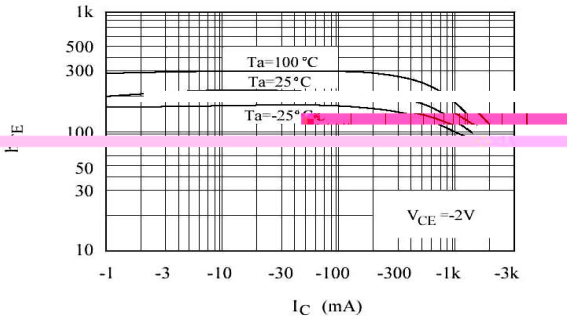
| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Collector to Emitter Breakdown Voltage | $V_{CEO}$ | $I_C$=-10mA $I_B$=0 | -30 | | | V |
| Emitter to Base Breakdown Voltage | $V_{EBO}$ | $I_E$=-1.0mA $I_C$=0 | -5.0 | | | V |
| Collector Cut-Off Current | $I_{CBO}$ | $V_{CB}$=-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 $I_E$=0 f=1.0MHz | | 48 | | pF |

## / Electrical Characteristic Curve

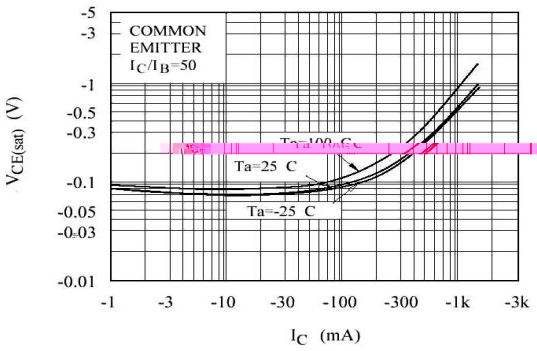
$I_C$ - $V_{CE}$



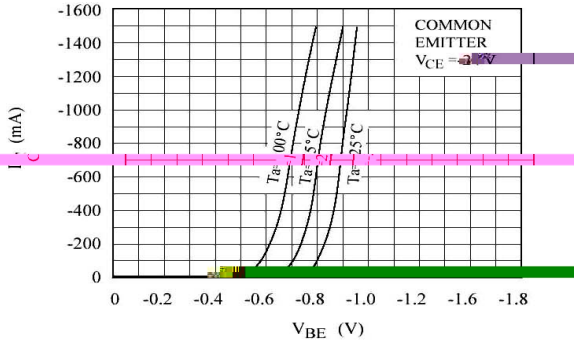

$h_{FE}$ - $I_C$



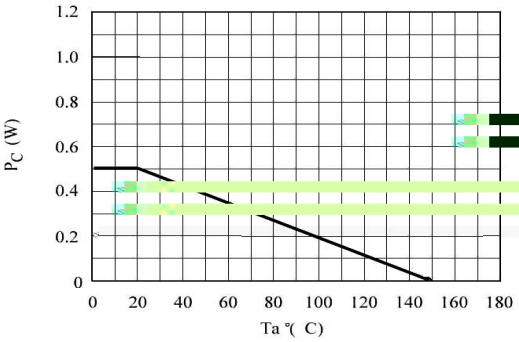

$V_{CE(sat)}$ - $I_C$



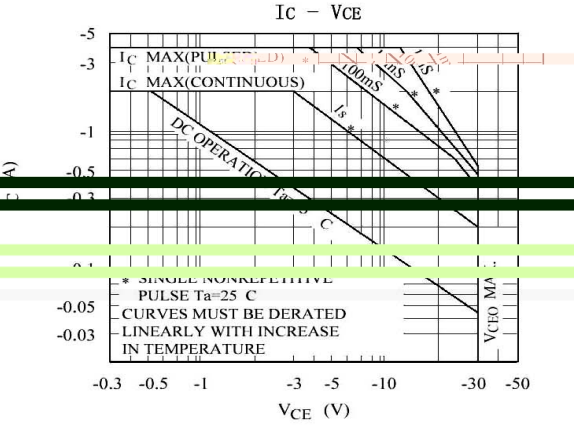

$I_C$ - $V_{BE}$



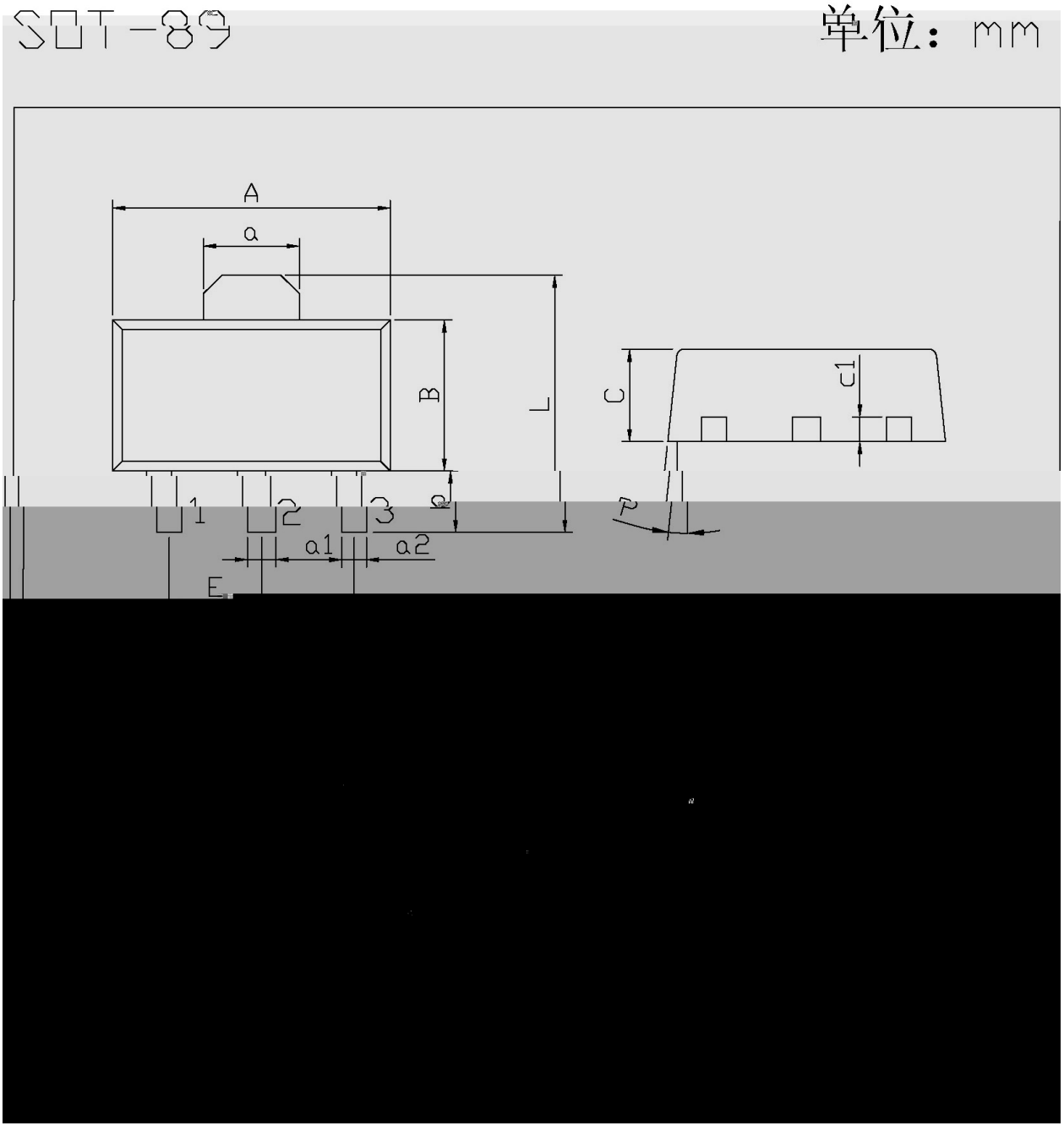

Pc - Ta



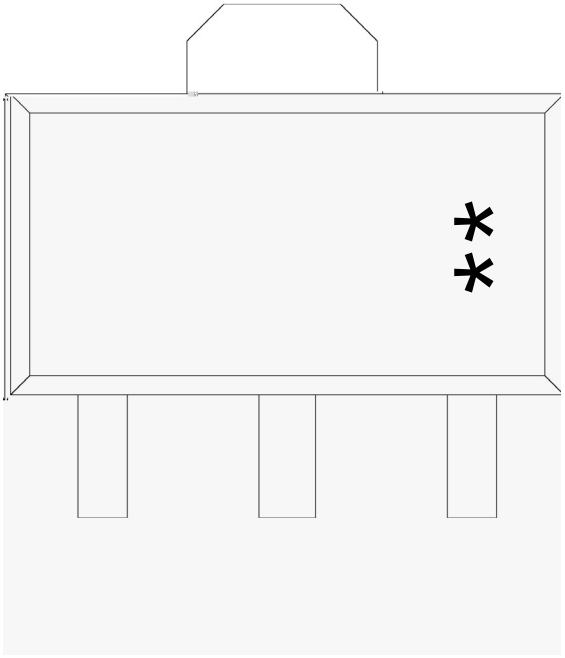

Ic – Vce



## / Package Dimensions



## / Marking Instructions




H

P3

O $h_{FE}$

**

Note:

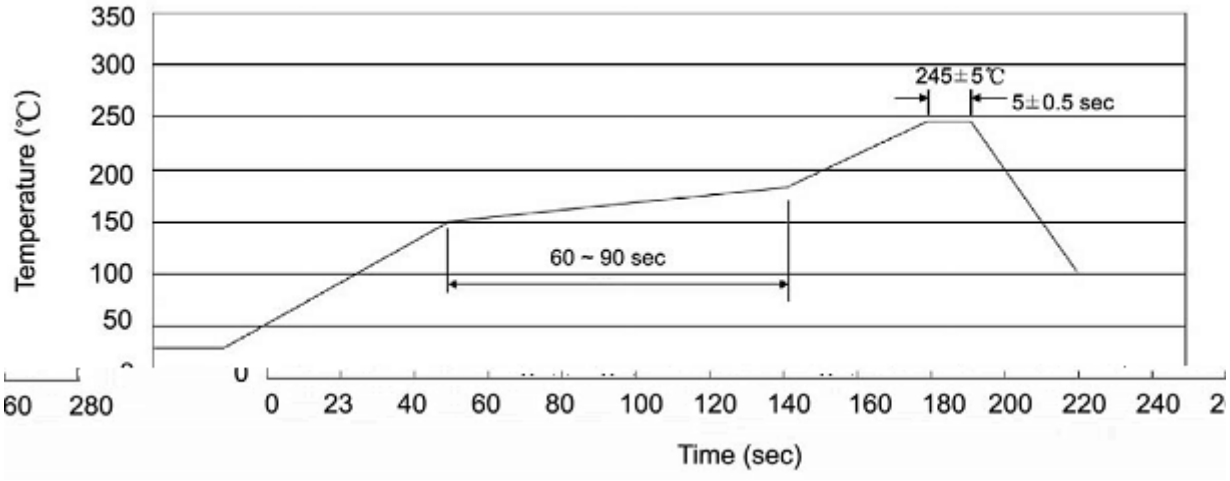
H: Company Code.

P3: Product Type.

O $h_{FE}$ Classifications Symbol

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

## ( ) /




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℃ Time:10±1 sec

## / Packaging SPEC.

/ REEL

| Package Type 封装形式 | Units 包装数量 | | | | | Dimension 包装尺寸 (unit: $mm^3$) | | |
|---|---|---|---|---|---|---|---|---|
| | 只 卷盘 | 卷盘 盒 | 只 盒 | 盒 箱 | 只 箱 | | 盒 | 箱 |
| | | | | | | 〃 | | |

## / Notices