

/ Descriptions

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

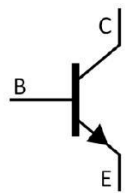
/ Features

，                      ，                      2SB1386  
Low  $V_{CE(sat)}$ , excellent DC current gain , complements the 2SB1386.

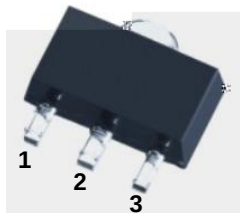
/ Applications

，  
Strobe flash applications, general power amplifier applications.

/ Equivalent Circuit



/ Pinning



PIN1    Base                      PIN 2    Collector                      PIN 3    Emitter

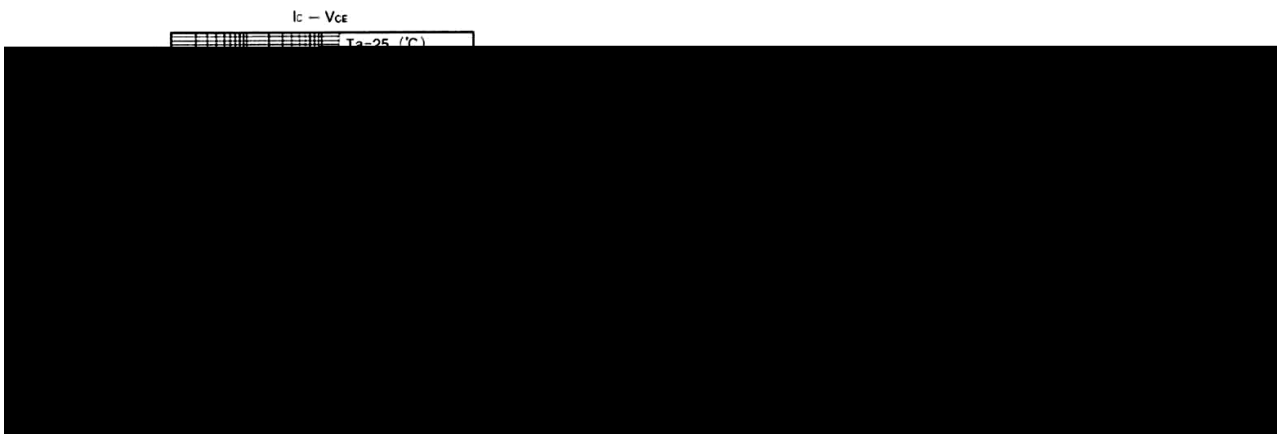
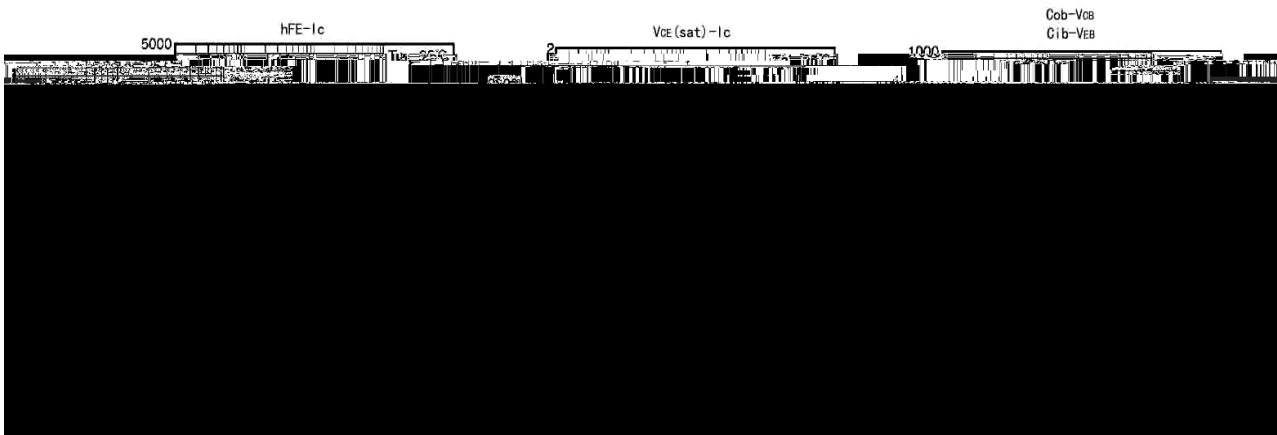
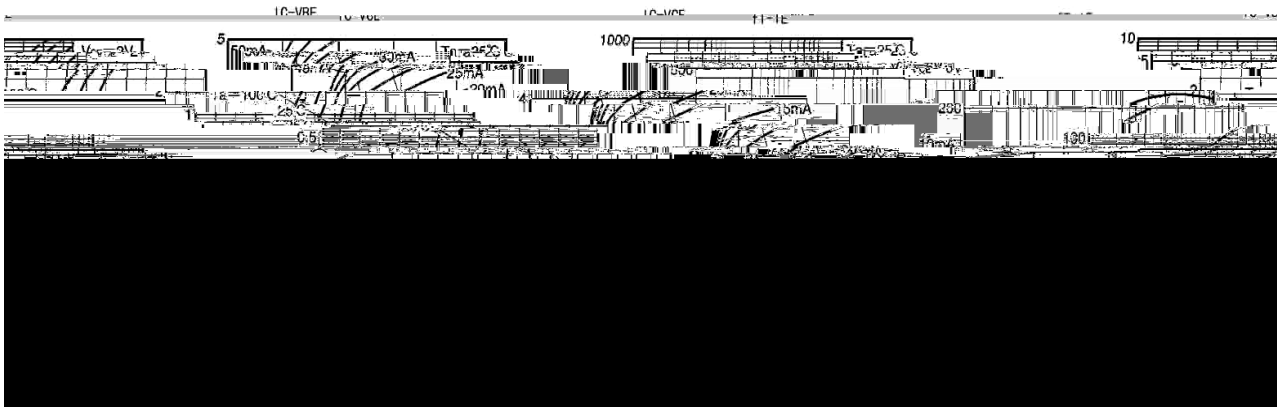
/ Marking

|                                    |            |            |
|------------------------------------|------------|------------|
| $h_{FE}$ Classifications<br>Symbol | Q          | R          |
| $h_{FE}$ Range                     | 120    270 | 180    390 |
| Marking                            | HAHQ ‡     | HAHR ‡     |

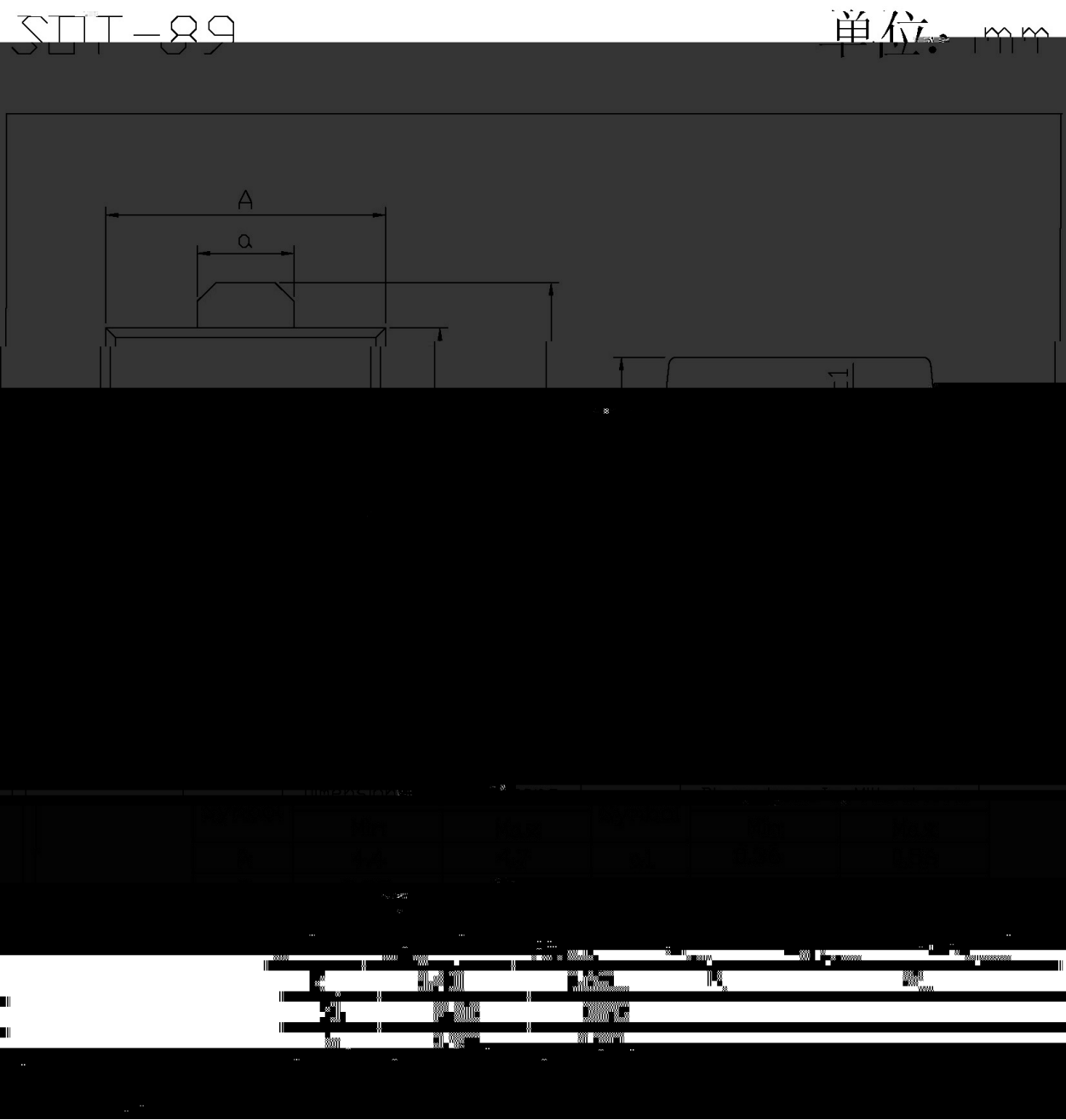
| Parameter                            | Symbol    | Rating  | Unit |
|--------------------------------------|-----------|---------|------|
| Collector to Base Voltage            | $V_{CBO}$ | 50      | V    |
| Collector to Emitter Voltage         | $V_{CEO}$ | 20      | V    |
| Emitter to Base Voltage              | $V_{EBO}$ | 6.0     | V    |
| Collector Current-Continuous         | $I_C$     | 5.0     | A    |
| Collector Current -Continuous(Pulse) | $I_{CP}$  | 10      | 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 Base Breakdown Voltage | $V_{CBO}$ | $I_C=50\mu A$ $I_E$ |     |     |     |      |

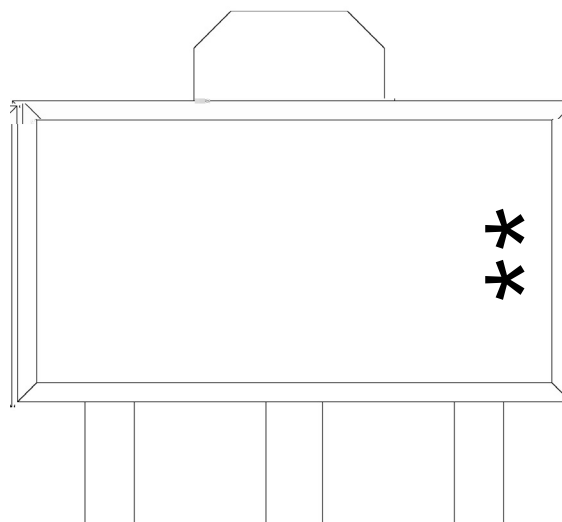
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



H

AH

Q  $h_{FE}$

\*\*

Note:

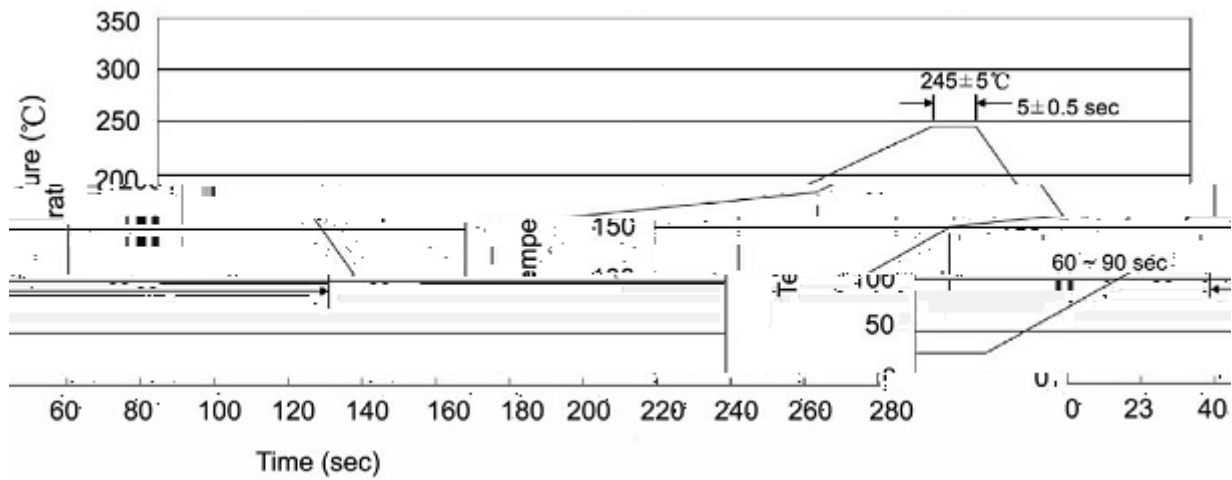
H: Company Code.

AH: Product Type.

Q  $h_{FE}$  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<br>封装形式 | Units 包装数量         |                         |                        |                              |                        | Dimension 包装尺寸 (unit: mm <sup>3</sup> ) |             |             |
|----------------------|--------------------|-------------------------|------------------------|------------------------------|------------------------|-----------------------------------------|-------------|-------------|
|                      | Units/Reel<br>只/卷盘 | Reels/Inner Box<br>卷盘/盒 | Units/Inner Box<br>只/盒 | Inner Boxes/Outer Box<br>盒/箱 | Units/Outer Box<br>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