

**/ Descriptions**

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

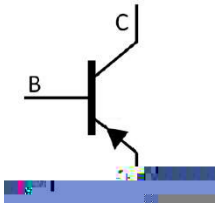
**/ Features**

Complements the 2SD1767.  
Low  $V_{CE(sat)}$ , complements the 2SD1767.

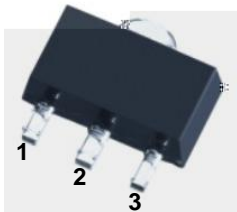
**/ Applications**

Medium power amplifier applications.

**/ Equivalent Circuit**



**/ Pinning**



PIN1 Base          PIN 2 Collector          PIN 3 Emitter

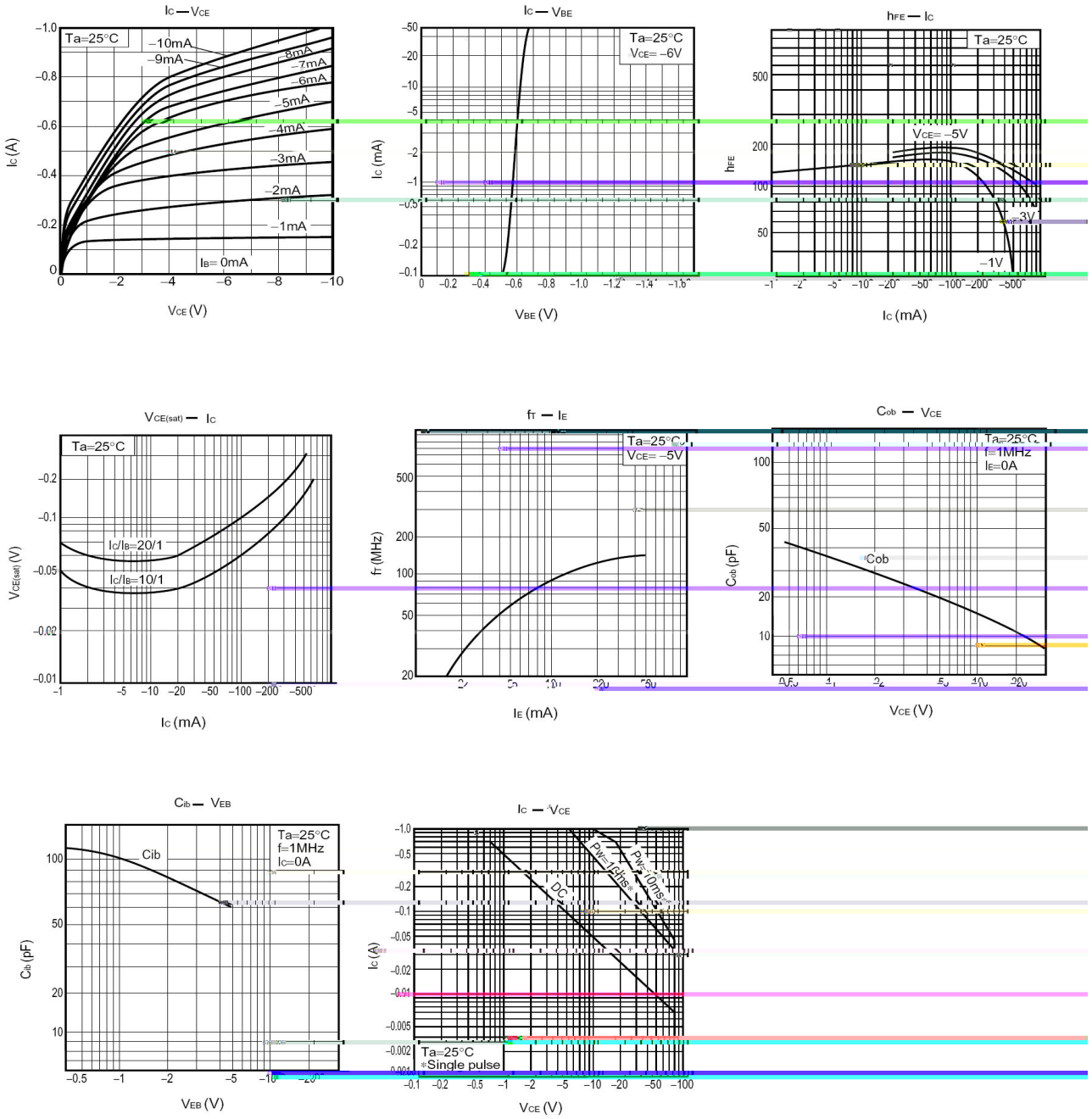
**/ Marking**

$h_{FE}$ Classifications Symbol	P	Q	R
$h_{FE}$ Range	82 180	120 270	180 390
Marking	HBDP <sup>*</sup>	HBDQ <sup>*</sup>	HBDR <sup>*</sup>

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	-80	V

Colle

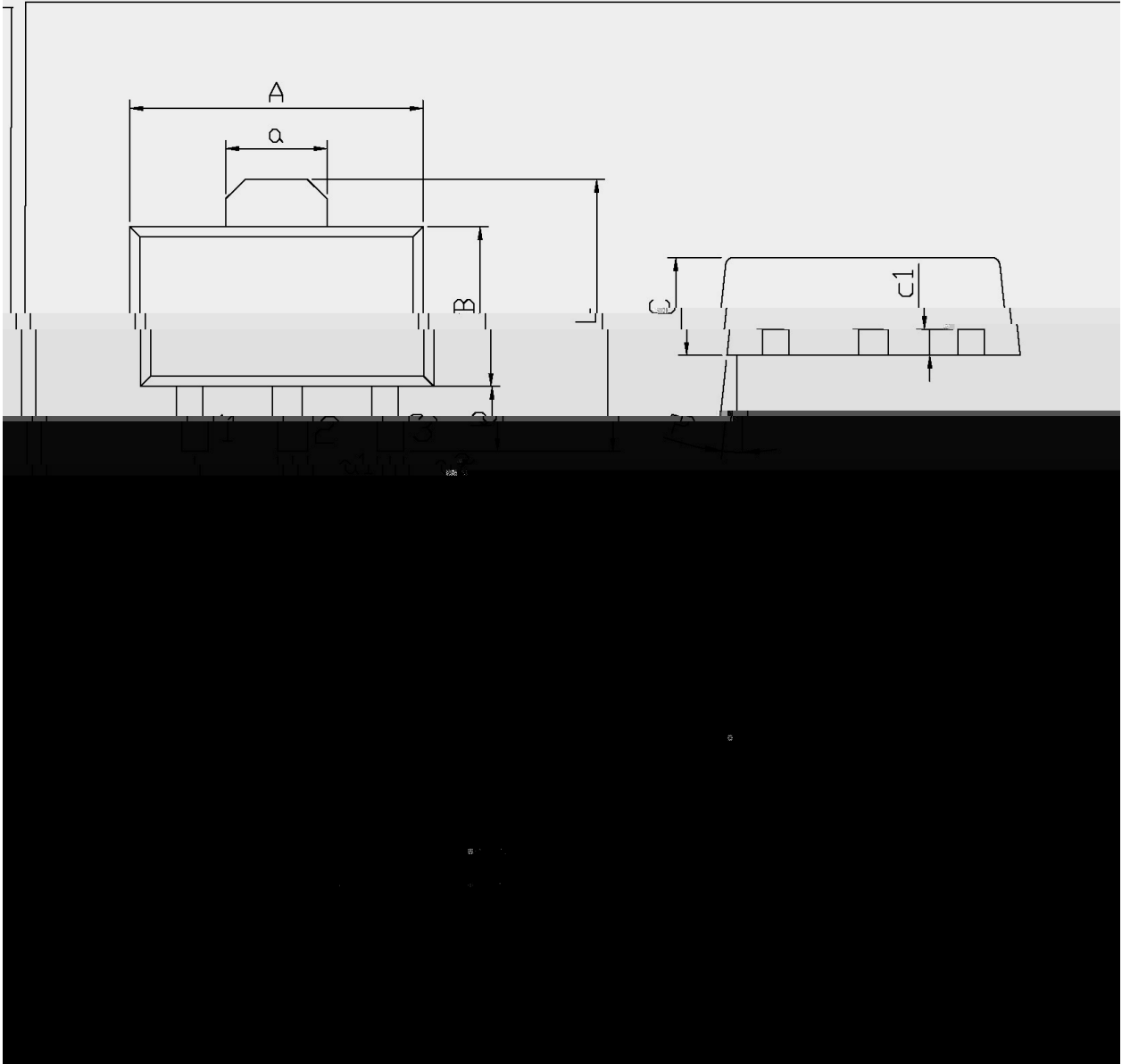
**/ Electrical Characteristic Curve**



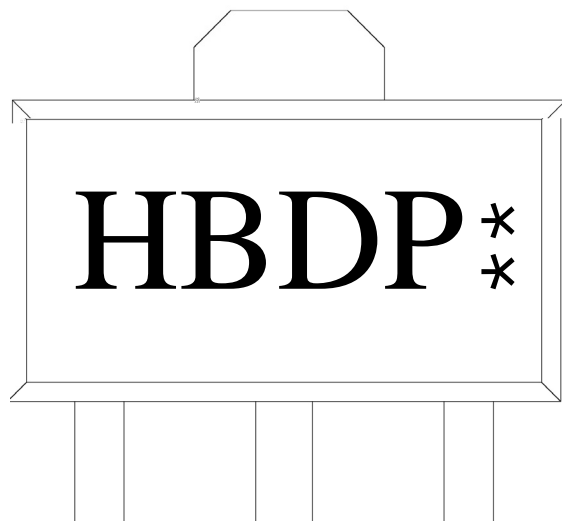
/ Package Dimensions



单位: mm



/ Marking Instructions



H

BD

P  $h_{FE}$

\*\*

Note:

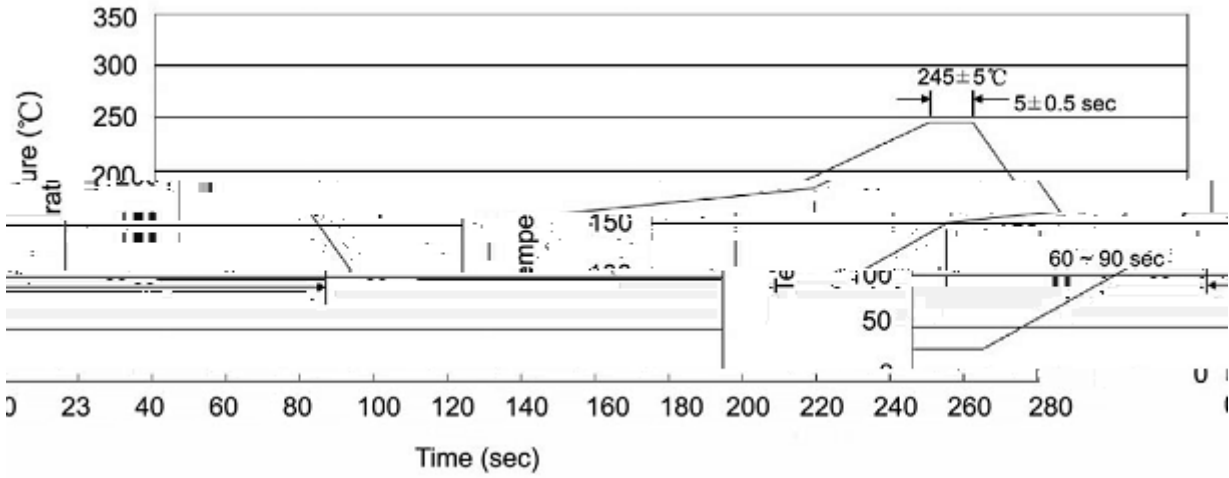
H: Company Code.

BD: Product Type.

P  $h_{FE}$  Classifications Symbol

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

( ) / K\d g\iXk i\`Gif]`d`]fi @ `l \]f n`Jf d\ `i e^ZGY\$=i\`z



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 <sup>3</sup> )		
	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