

/ Descriptions

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

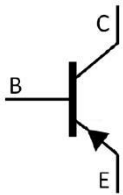
/ Features

Complementary pair with 2SC2881.
High f_T , high V_{CEO} , small flat package, complementary pair with 2SC2881.

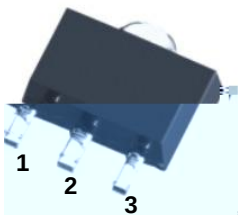
/ Applications

Power amplifier applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ Marking

h_{FE} Classifications Symbol	O	Y
h_{FE} Range	80 160	120 240
Marking	HDO	HDY

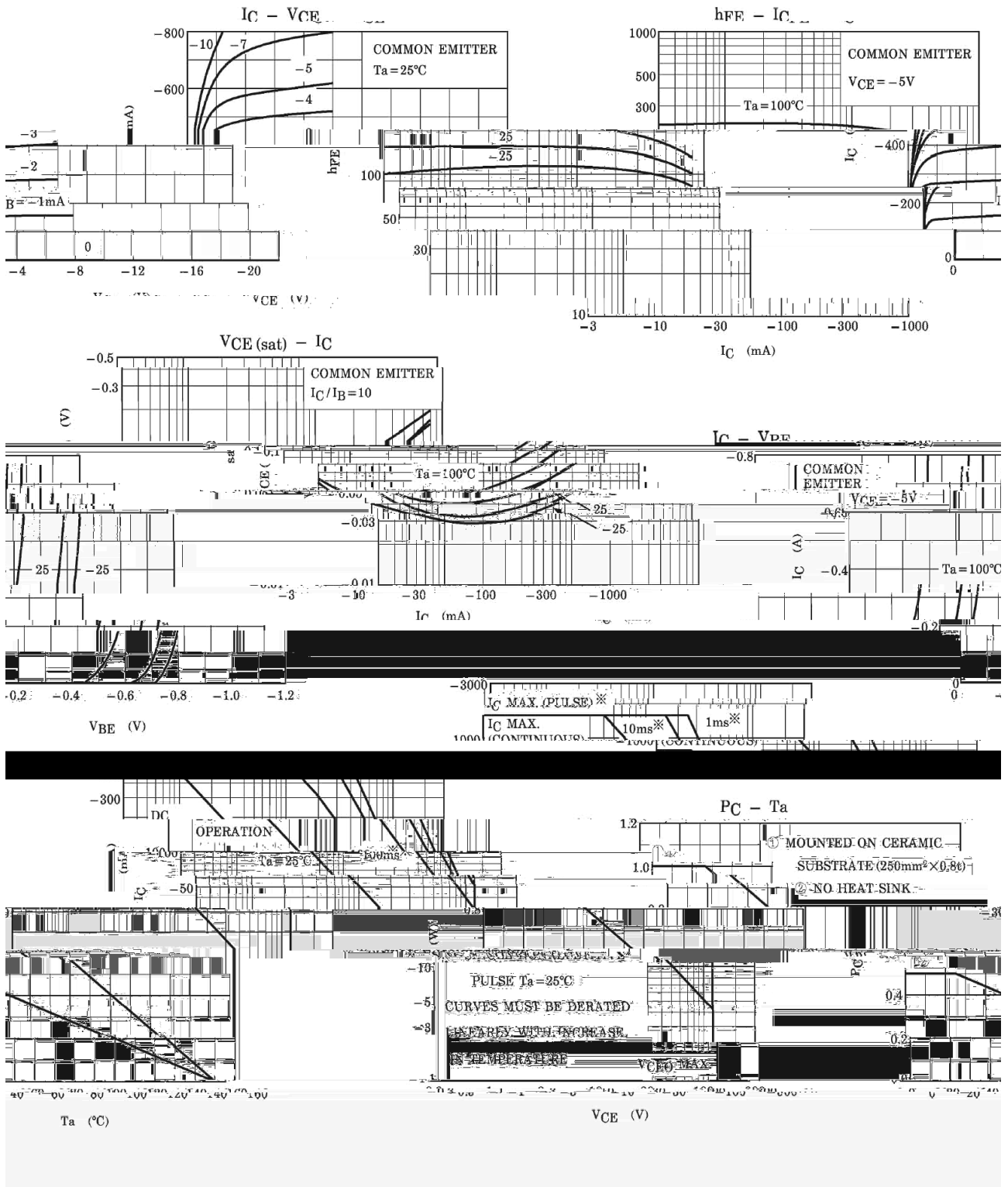
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-120	V
Collector to Emitter Voltage	V_{CEO}	-120	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current-Continuous	I_C	-800	mA
Collector Base-Continuous	I_B	-160	mA
Collector Power Dissipation	P_C	500	mW
Collector Power Dissipation*	$*P_C$	1.0	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

*mounted on ceramic substrate(250mm²×0.8t)
* 250mm²×0.8t

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=-10mA$ $I_B=0$	-120			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_C=-1.0mA$ $I_C=0$	-5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-120V$ $I_E=0$			-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}	$V_{CE}=-5.0V$ $I_C=-100mA$	80		240	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-500mA$ $I_B=-50mA$			-1.0	V

Collector to Base Voltage V

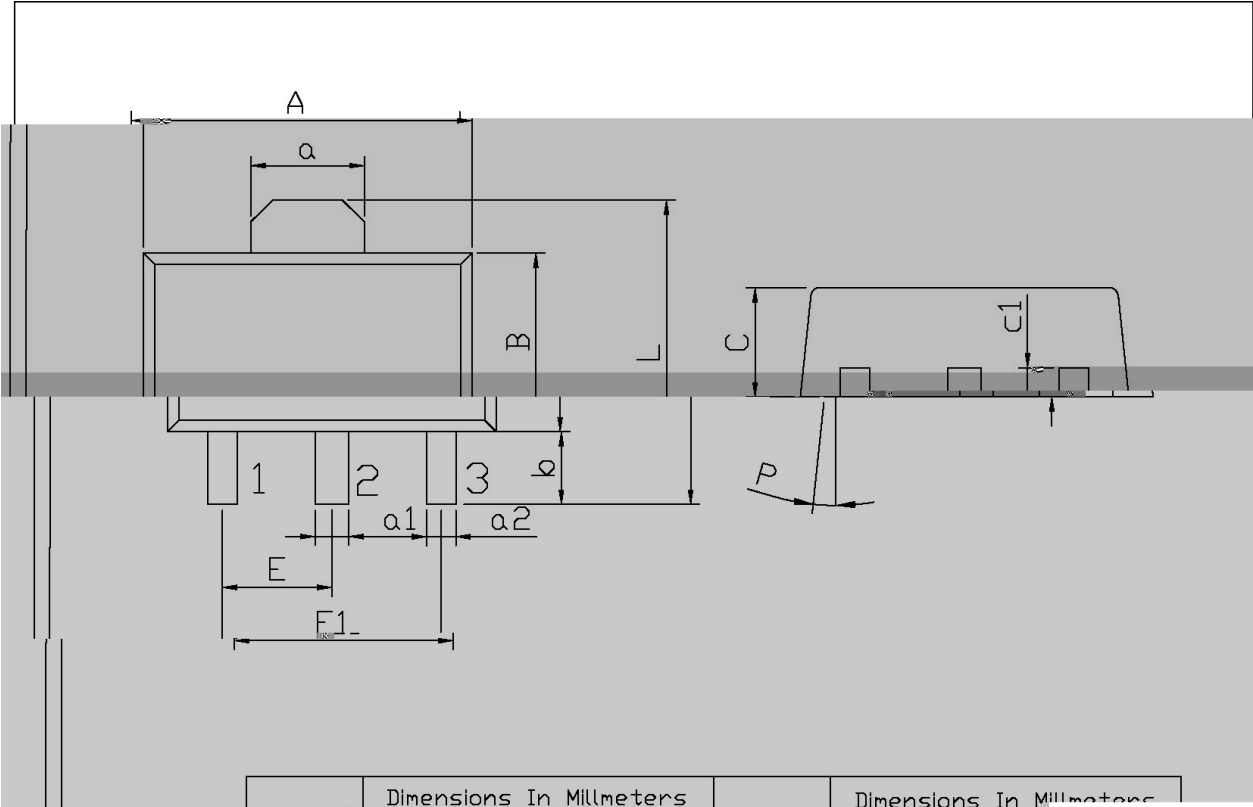
/ Electrical Characteristic Curve



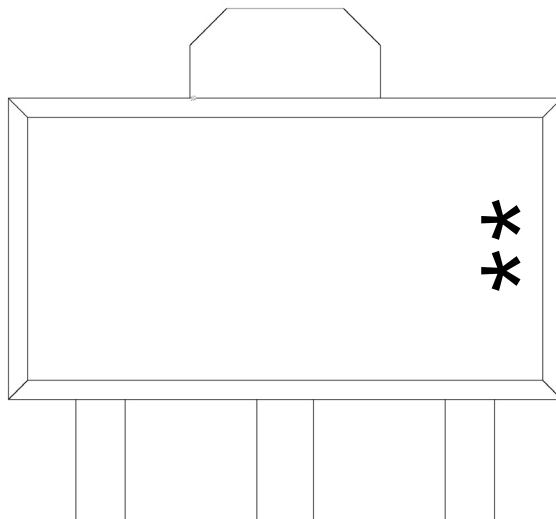
/ Package Dimensions

SQT-89

单位：mm



/ Marking Instructions



H

D

O h_{FE}

**

Note:

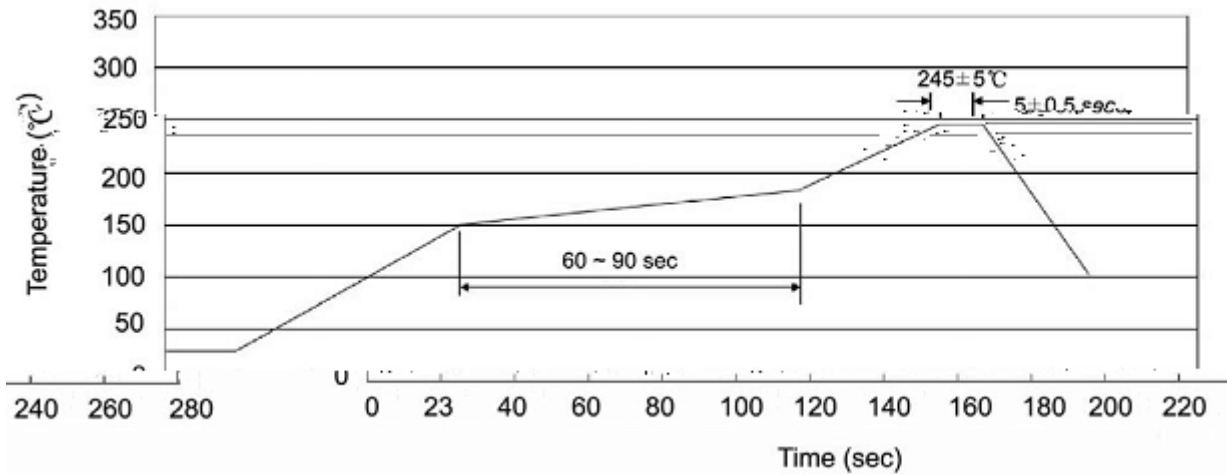
H: Company Code.

D: 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 °C, Time:60~90sec. |
| 2 | 245±5 | | 5±0.5sec; | 2.Peak Temp.:245±5 °C, Duration:5±0.5sec. | |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 °C/sec. |

/ Resistance to Soldering Heat Test Conditions

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

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box
SOT-89	1,000	7	7,000	8	56,000	7 ×12	180×120×180	385×257×392

/ Notices