

/ Descriptions

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

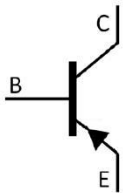
/ Features

1W, KTC4375
1W(*mounted on ceramic substrate),complementary pair with KTC4375.

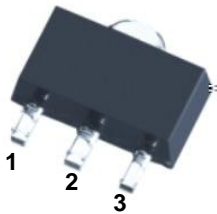
/ Applications

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	HIO	HIY

/ Absolute Maximum Ratings(Ta=25)

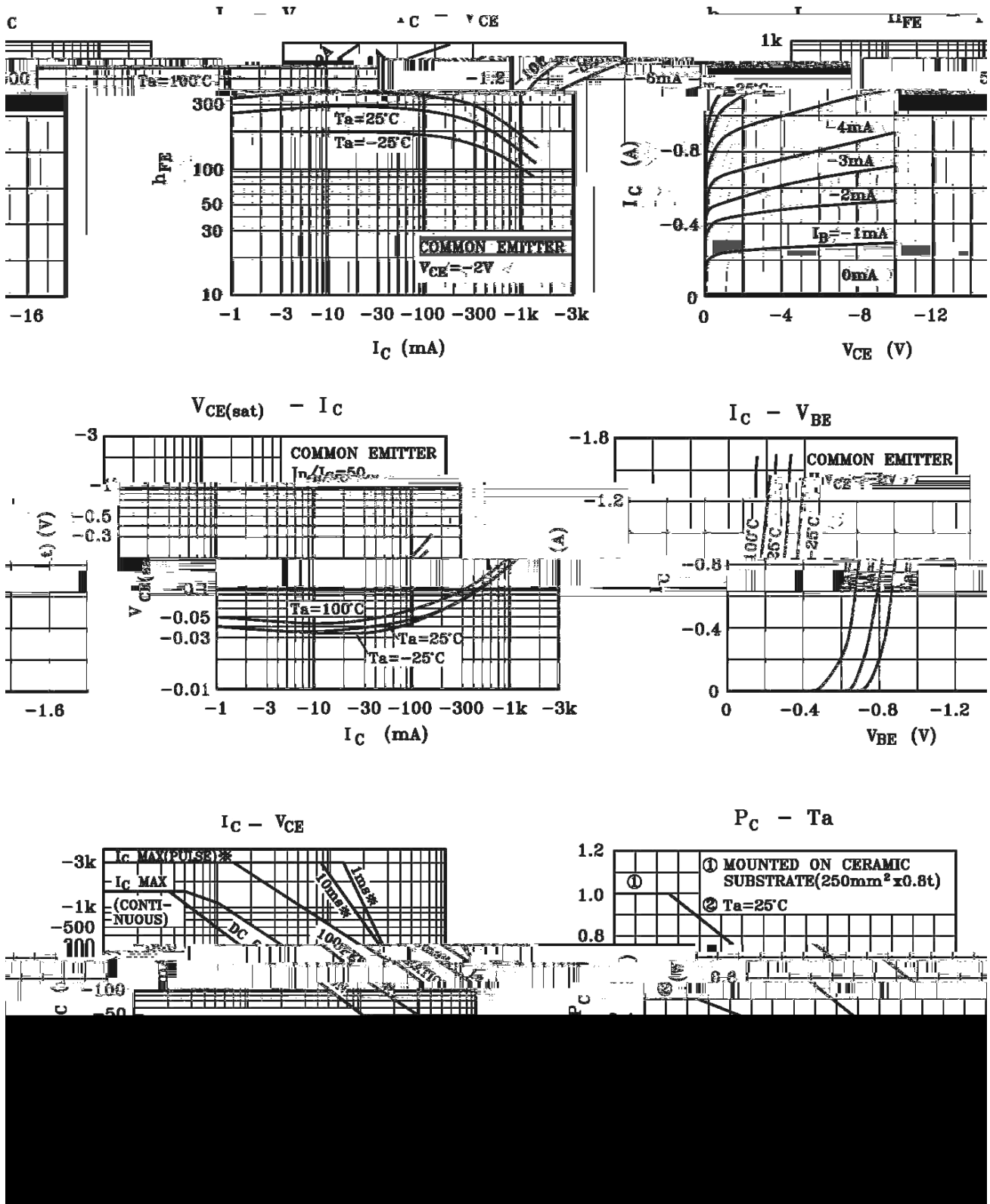
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-30	V
Collector to Emitter Voltage	V_{CEO}	-30	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-1.5	A
Collector Base – Continuous	I_B	-0.3	A
Collector Power Dissipation	P_C	500	mW
Collector Power Dissipation*	* P_C	1.0	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 150	°C

*BRKTA1663 mounted on ceramic substrate (250mm² 0.8t)

/ Electrical Characteristics(Ta=25)

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	μA
Emitter Base Cut-Off Current	I_{EBO}	$V_{EB}=-5.0V$ $I_C=0$			-0.1	μA
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}	$V_{CB}=-10V$ $I_E=0$ $f=1.0MHz$			50	pF

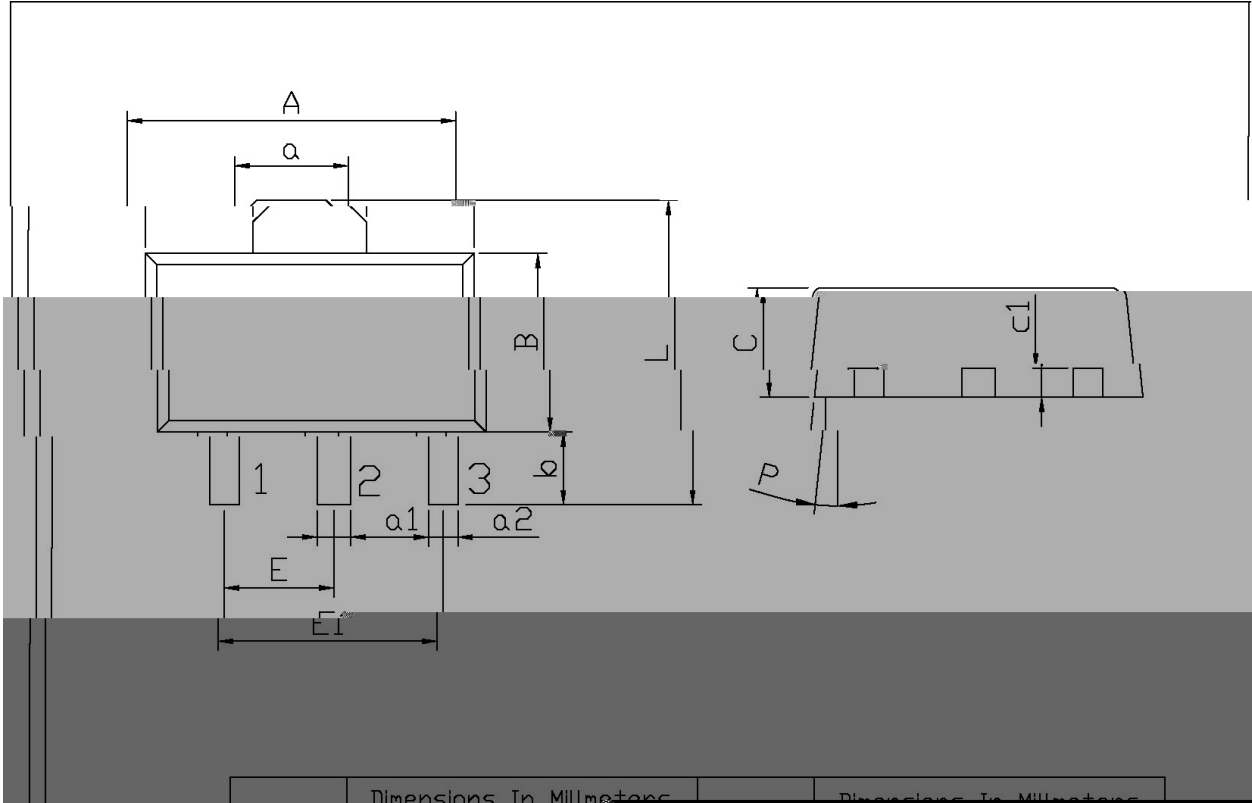
/ Electrical Characteristic Curve



/ Package Dimensions

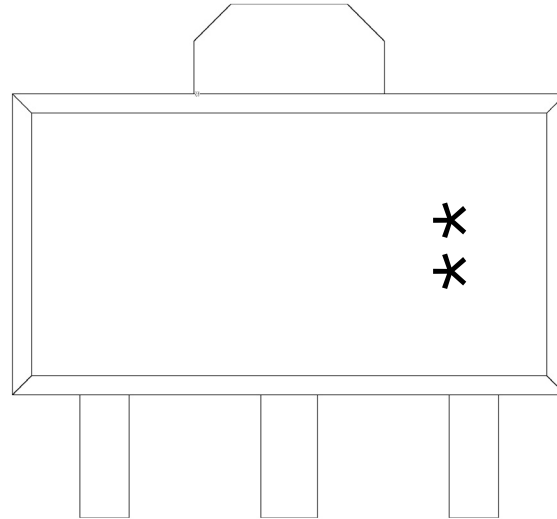
SOT-89

单位: mm



Dimensions In Millimeters		Dimensions In Millimeters	
B	2.35	a2	0.30
L	3.80	C	1.25
a	1.45	E1	0.70
E	1.40	U1	0.25
E1	2.00	P	0.10
a1	0.85		

/ Marking Instructions



H

I

O: h_{FE}

**

Note:

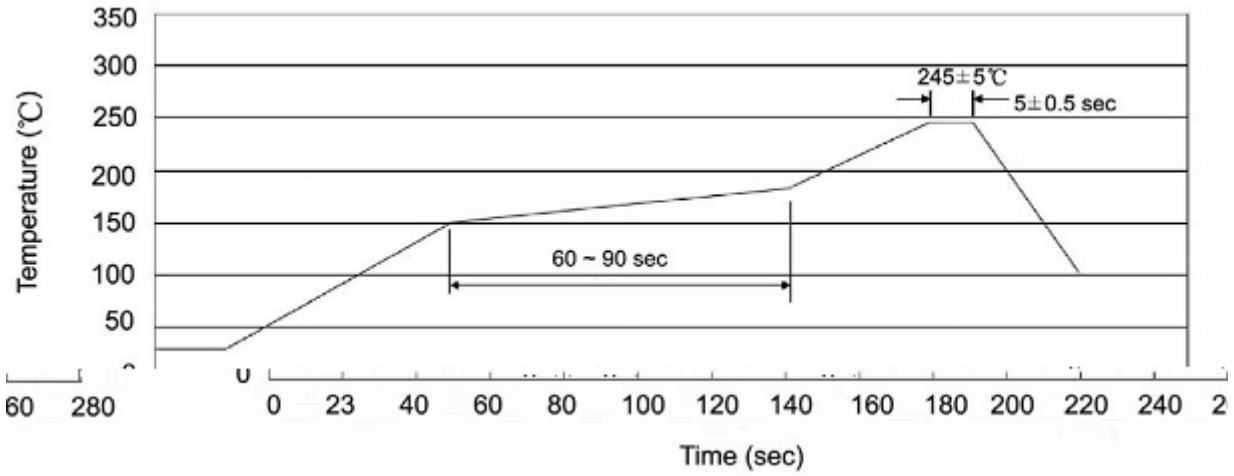
H: Company Code.

I: Product Type.

O: h_{FE} Classifications Symbol

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

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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