

/ Descriptions

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

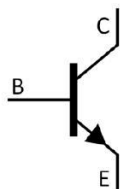
/ Features

， KTA1664
Small flat package, complementary to KTA1664.

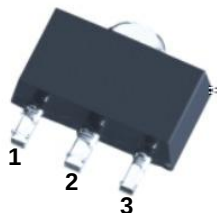
/ Applications

High current application.

/ 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	HPO	HPY

/ Absolute Maximum Ratings(Ta=25 –)

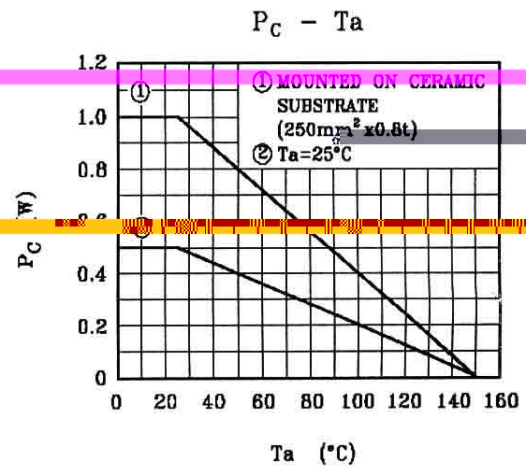
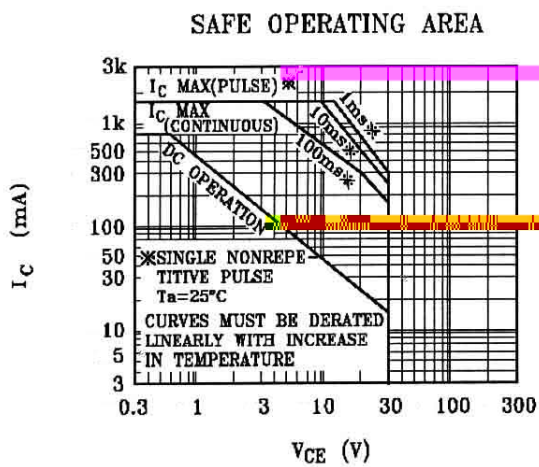
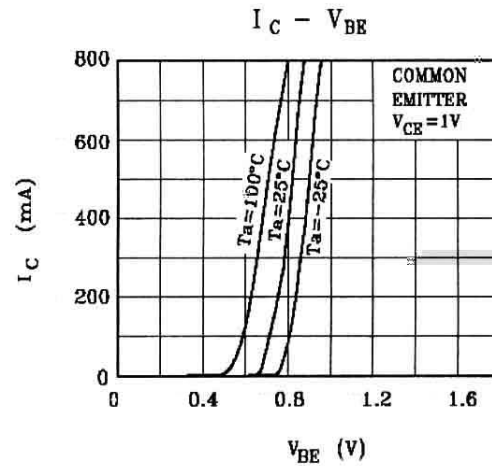
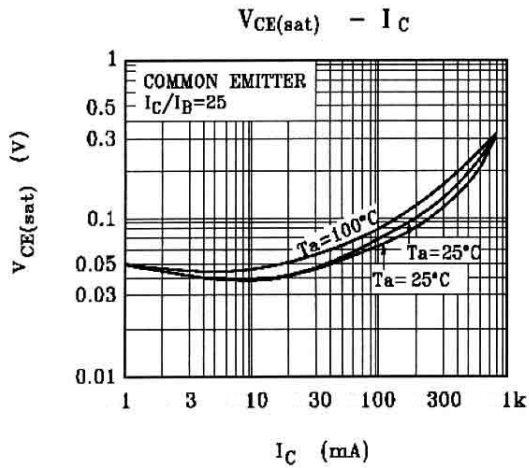
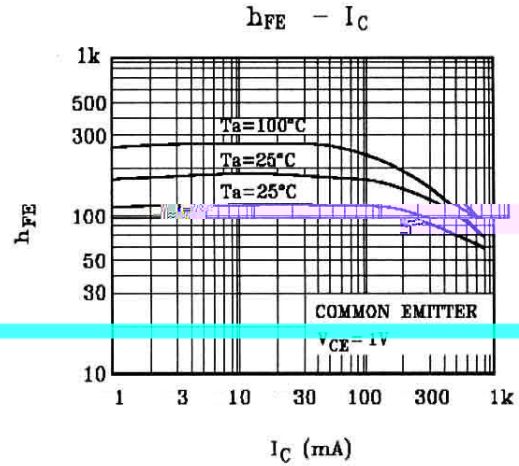
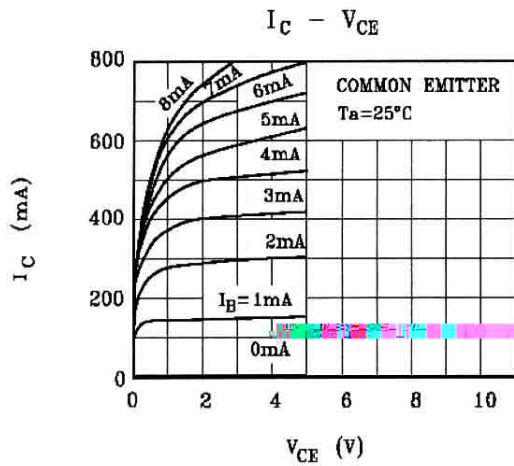
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	35	V
Collector to Emitter Voltage	V_{CEO}	30	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	800	mA
Collector Base – Continuous	I_B	160	mA
Collector Power Dissipation	P_C	500	mW
Collector Power Dissipation*	$*P_C$	1.0	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

* BRKTC4379 mounted on ceramic substrate(250mm²×0.8t).

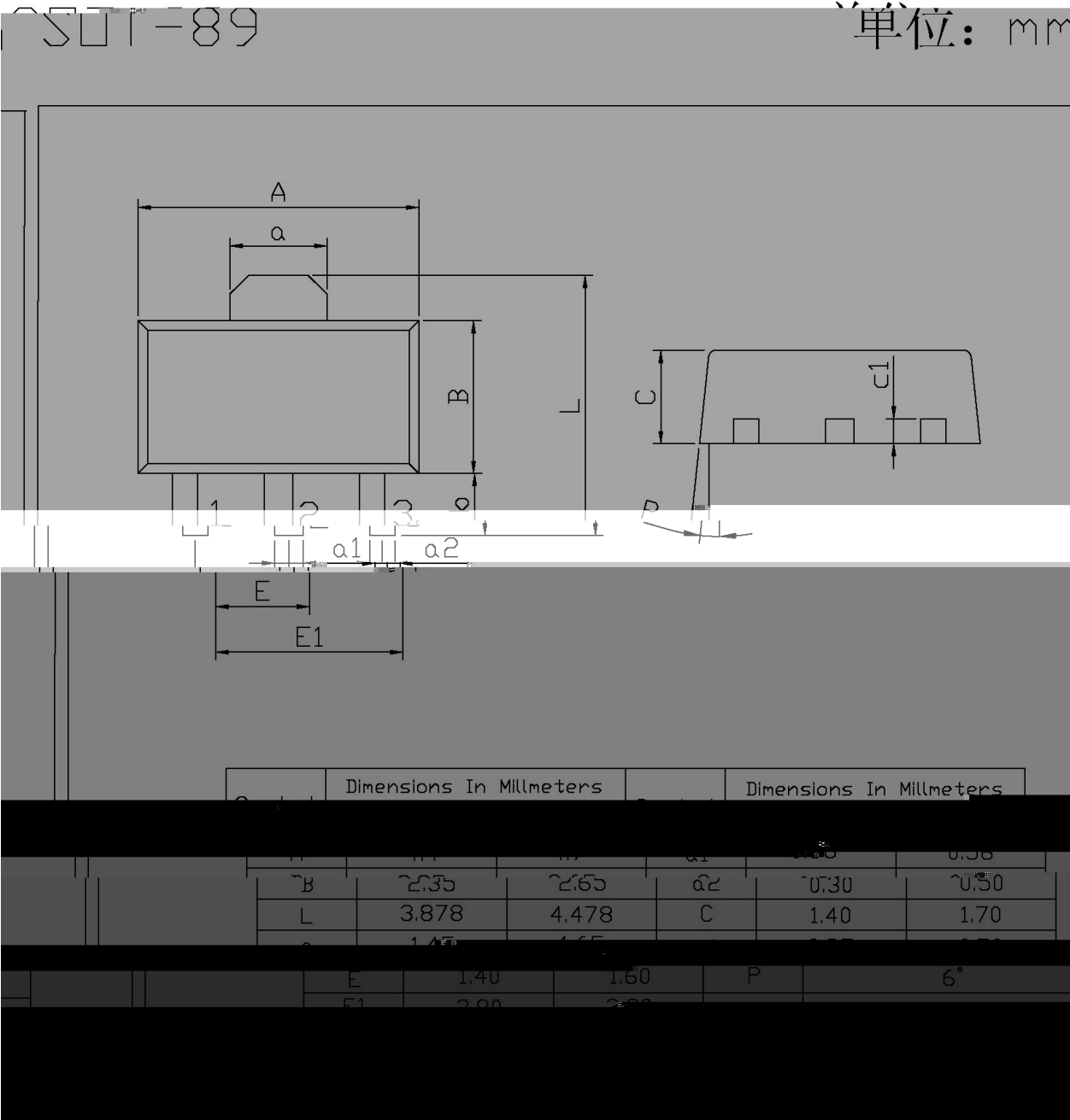
/ Electrical Characteristics(Ta=25 –)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=10mA$ $I_B=0$	30			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=35V$ $I_E=0$			0.1	A
Emitter Base Cut-Off Current	I_{EBO}	$V_{EB}=5.0V$ $I_C=0$			0.1	A
DC Current Gain	$h_{FE(1)}$	$V_{CE}=1.0V$ $I_C=100mA$	100		320	
	$h_{FE(2)}$	$V_{CE}=1.0V$ $I_C=700mA$	35			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA$ $I_B=20mA$			0.5	V
Base to Emitter Voltage	V_{BE}	$V_{CE}=1.0V$ $I_C=10mA$	0.5		0.8	V
Transition Frequency	f_T	$V_{CE}=5.0V$ $I_C=10mA$		120		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V$ $I_E=0$ $f=1.0MHz$		13		pF

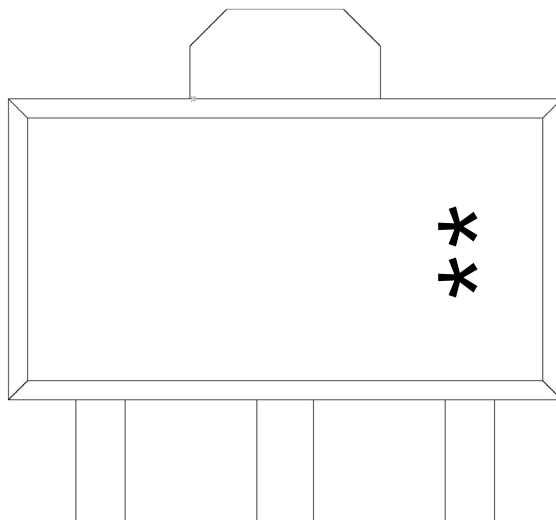
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



H

P

O h_{FE}

**

Note:

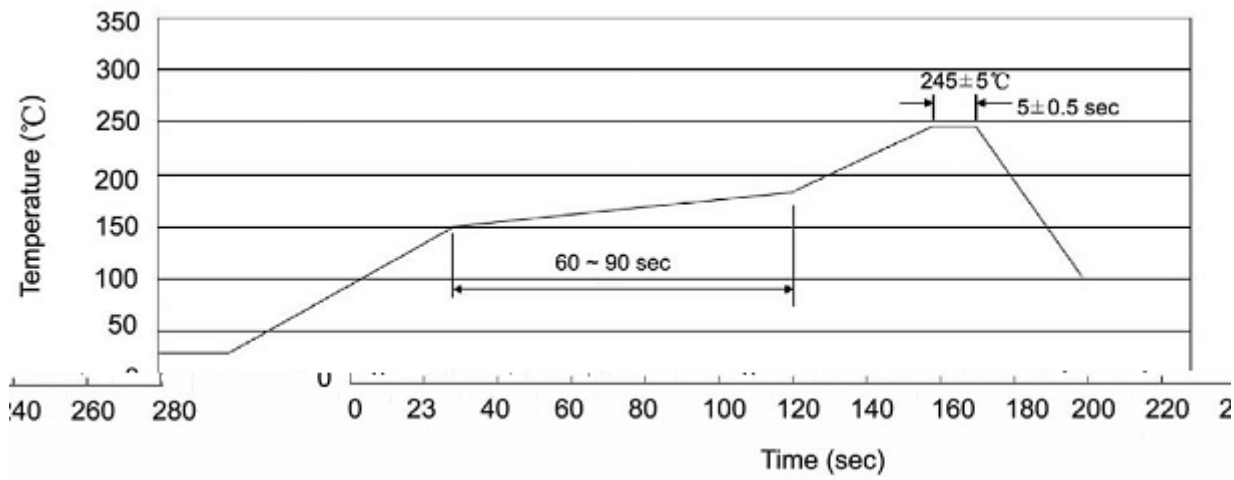
H: Company Code.

P: Product Type.

O h_{FE} Classifications Symbol

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

() / Whp shudwxuh Suriloh i ru LU Uhior z Vroghulqj+Se0lueh,



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)		
	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