KTA1663

Rev.E Mar.-2016

DATA SHEET

"Yت / Descriptions

VRW0;< ṂṂ Ŀ SQS ÆṀ ч s Ⅱ ٦ Silicon PNP transistor in a SOT-89 Plastic Package.

◕ È / Features

ɪ ﻉ ᑕ ı ' ı ڑ 4 Z/ль NWF76:8 Ѝ ´

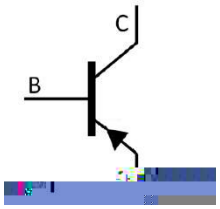
1W(*mounted on ceramic substrate),complementary pair with KTC4375.

४ ڍ / Applications

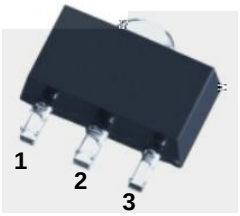
ڪ ڙ ↄ Ⅼ

High current applications.

Л ف ڰ ≠ ع / Equivalent Circuit



ẫ ﺍ ŭ / Pinning



PIN1 χ Base PIN 2 χ Collector PIN 3 χ Emitter

ł. ʜ ב / Marking

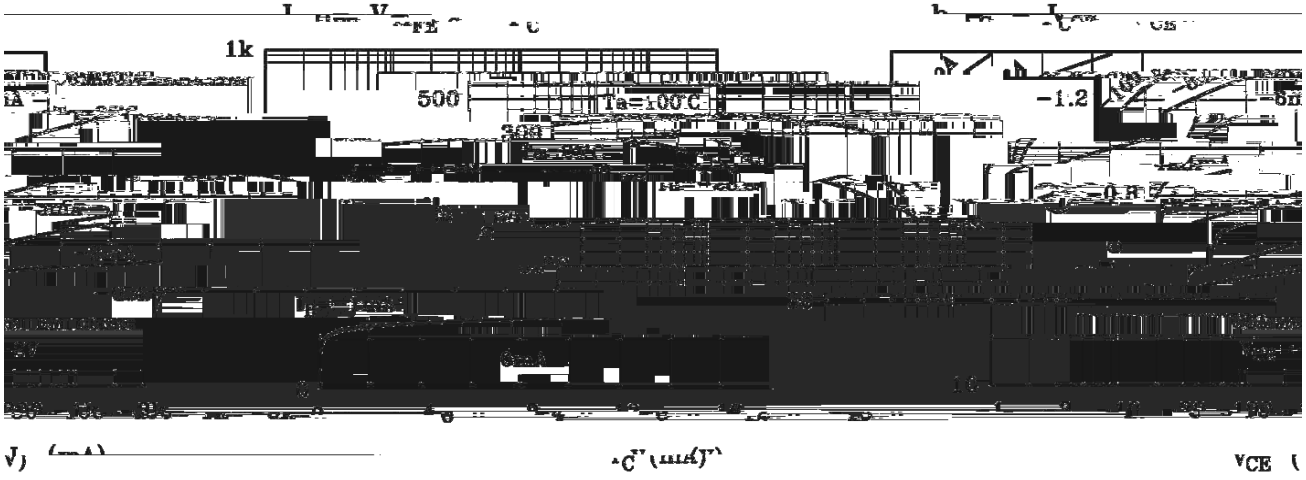
h_{FE} Classifications Symbol	O	Y
h_{FE} Range	100 200	160 320
Marking	HIO ‡	HIY ‡

v ‴Ω Parameter	٩ N Symbol	‴Ω Ö Rating	D Ч 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	
Storage Temperature Range	T_{stg}	-55 150	

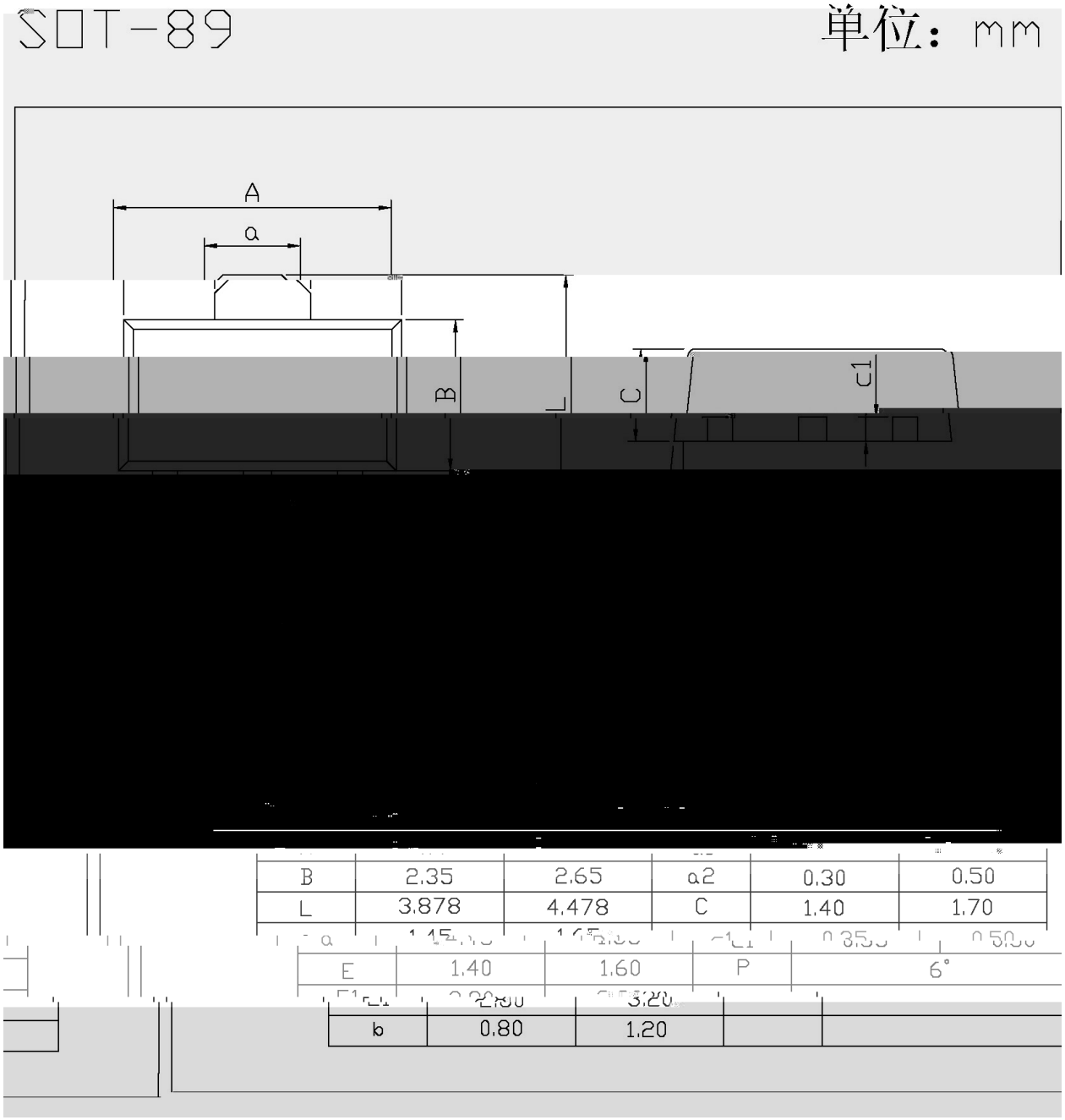
*BRKTA1663 mounted on ceramic substrate ($250mm^2 \times 0.8t$)

v ‴Ω Parameter	٩ N Symbol	⊥ :ˆ ٹ Test Conditions	ώ ņ Ö Min	Ɛ ʒ Ö Typ	ώ ² Ö Max	D Ч 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	V		50	pF

≠ Ǝ ̃Ạ ́E ∀ ʃ / Electrical Characteristic Curve

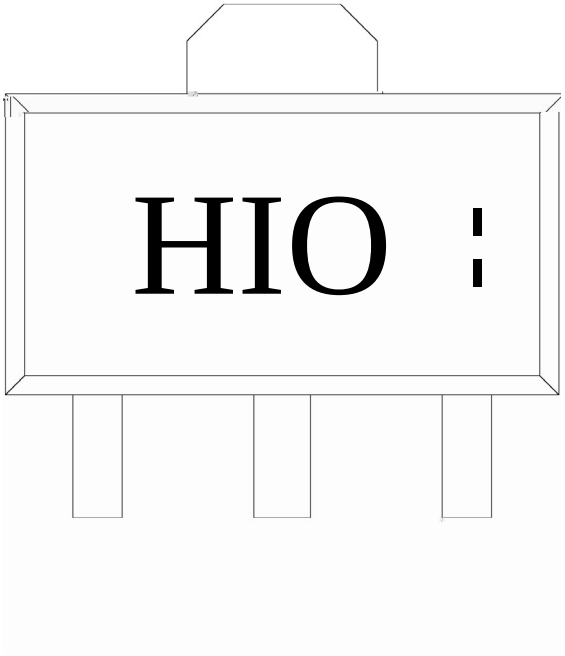


ᵘ ĖÒĻ ƒ / Package Dimensions



B	2.35	2.65	a2	0.30	0.50
L	3.878	4.478	C	1.40	1.70
E	1.40	1.60	P	6°	
b	0.80	1.20			

ł. Ļ"Ω / Marking Instructions



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Note:

H: Company Code.

I: Product Type.

O: h_{FE} Classifications Symbol

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

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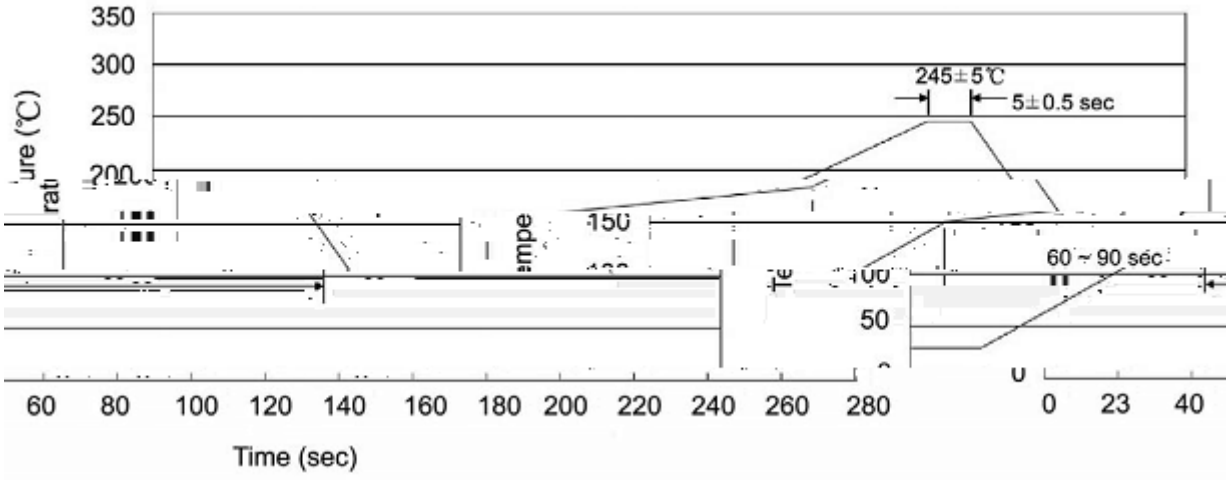

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1 Ĺ ♬ □ ẙ 25 Ḱ 150 ɬ ı ˋH ᴊ 60 Ḱ 90sec;

2 Š Ë □ ẙ 245 ° 5 ɬ ı ˋH ᴊ ˋY ⅄ ѭ 5 ° 0.5sec;

3 ì ˙ ⅄ ˛ ɔ ѡ ẙ ѭ 2 Ḱ 10 ɬ /sec.

Note:

1.Preheating:25~150 ɬ , Time:60~90sec.

2.Peak Temp.:245 ° 5 ɬ , Duration:5 ° 0.5sec.

3. Cooling Speed: 2~10 ɬ /sec.

⅄ ü ɋ ‾ ˋY Ţ / Resistance to Soldering Heat Test Conditions

□ ẙ χ 260 ° 5 ɬ ˋH ᴊ χ 10 ° 1 sec. Temp.:260±5 Time:10±1 sec

ɒ Ŀ ≮ — / Packaging SPEC.

ɔ ` ɣ Ŀ / REEL

Package Type	Units					Dimension		(unit mm³)
	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

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