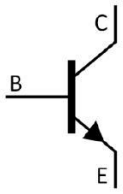
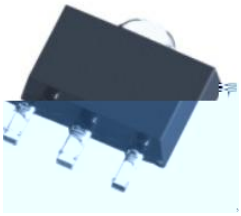
Silicon NPN transistor in a SOT-89 Plastic Package.

I

Adoption of MBIT processes, low collector-to-emitter saturation voltage, fast Switching Speed, Large current capacity and wide ASO, Complementary to KTB1124. Halogen-free Product.

Voltage regulators ,relay drivers lamp drivers, electrical equipment.





PIN1 Base PIN 2 Collector PIN 3 Emitter

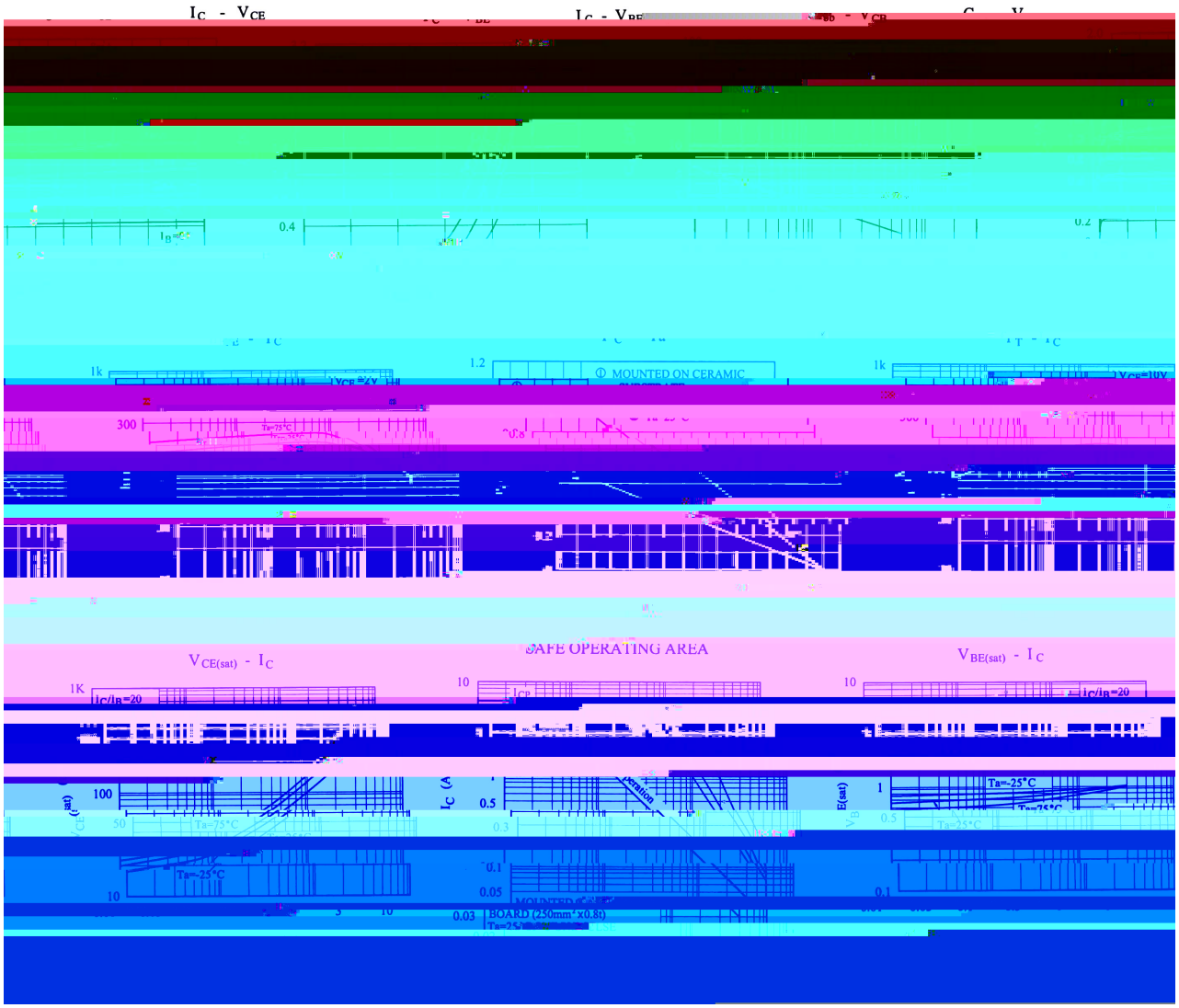
h_{FE} Classifications Symbol	A	B	C
h_{FE} Range	100 200	140 280	200 400
Marking	YHA **	YHB **	YHC **

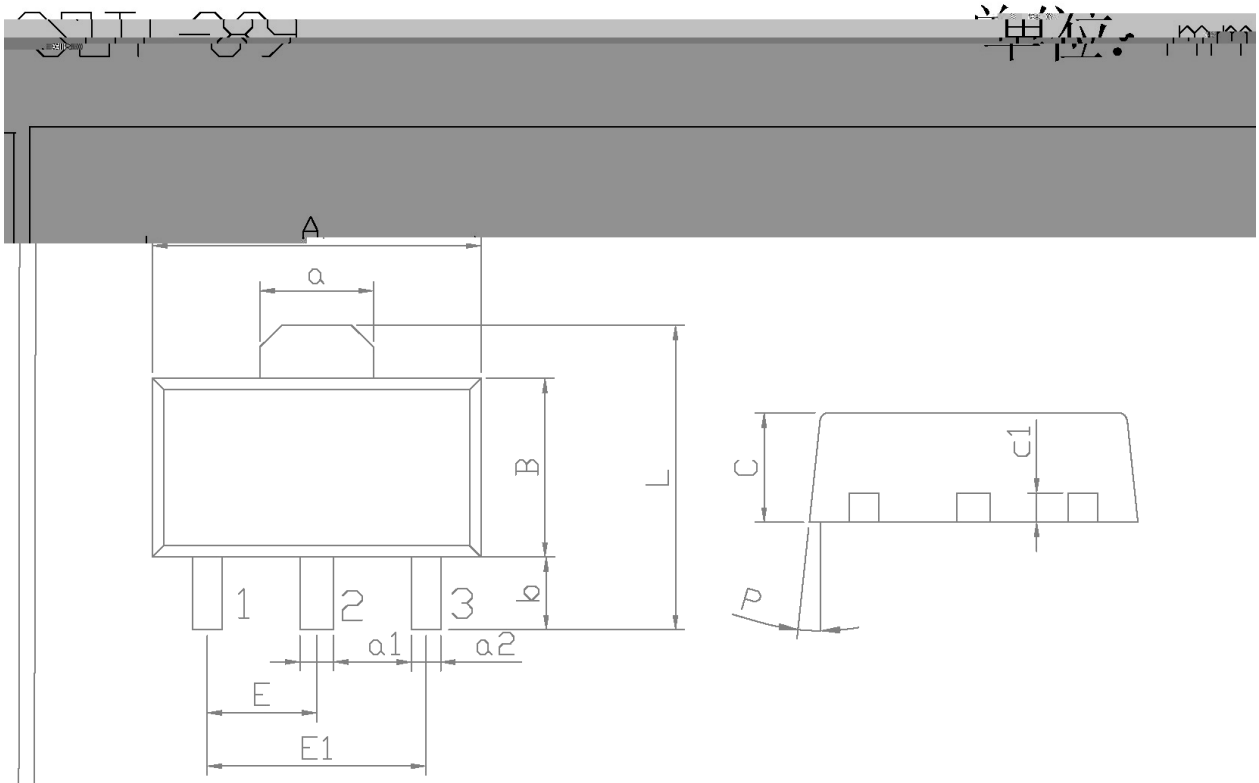
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	50	V
Emitter to Base Voltage	V_{EBO}	6.0	V
Collector Current - Continuous	I_C	3.0	A
Collector Current – Continuous Pulse	I_{CP}	6.0	A
Collector Power Dissipation	P_C	500	mW
Collector Power Dissipation*	*P_C	1.0	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

*:Package mounted on ceramic substrate(250mm^2×0.8t)

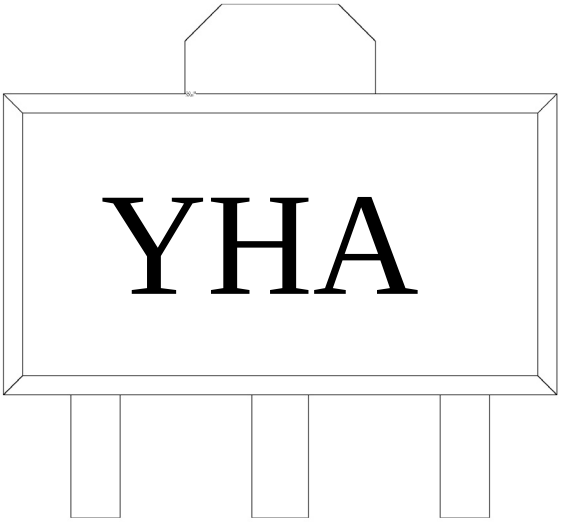
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=10 A I_E=0	60			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=1.0mA I_B=0	50			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=10 A I_C=0	6.0			V
Collector Cut-Off Current		V_{CB}=40V I_E=0			1.0	A
Emitter Base Cut-Off Current		V_{EB}=4.0V I_C=0			1.0	A
DC Current Gain		V_{CE}=2.0V I_C=100mA	100		400	
		V_{CE}=2.0V I_C=3.0A	35			
Collector to Emitter Saturation Voltage		I_C=2.0A I_B=100mA		0.19	0.5	V
Base to Emitter Voltage		I_C=2.0A I_B=100mA		0.94	1.2	V

Transition Frequency


SAFE OPERATING AREA
MOUNTED ON CERAMIC
BOARD(250mm*X0.8t)



Symbol	Dimensions In Millmeters		Symbol	Dimensions In Millmeters	
	Min	Max		Min	Max
A	4.4	4.7	a1	0.36	0.56
B	2.35	2.65	a2	0.30	0.50
L	3.878	4.479	C	1.40	1.70
a	1.45	1.65	c1	0.35	0.50



Y

H

A h_{FE}

Note:

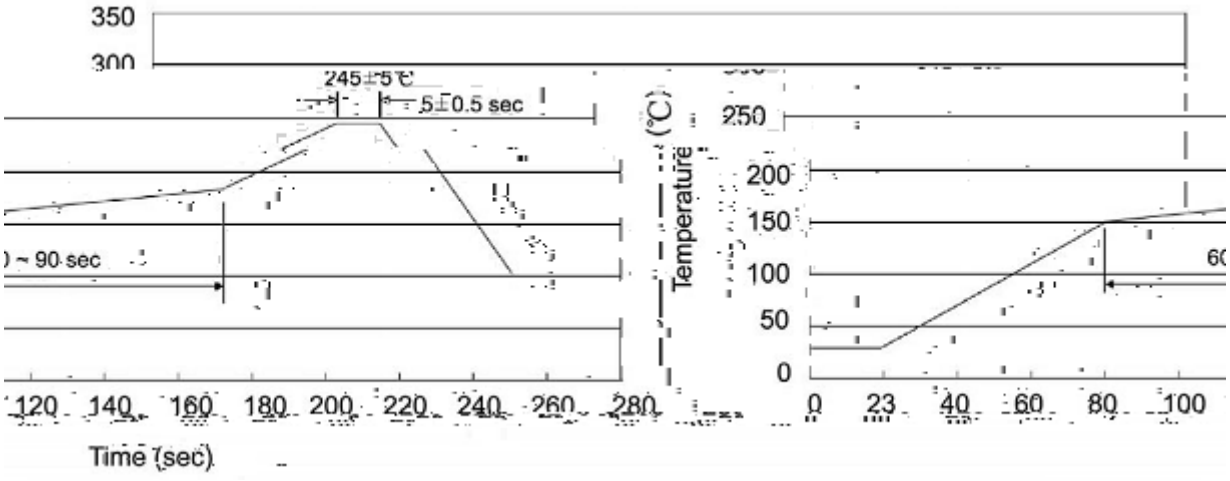
Y: Product Type.

H: Company Code.

A h_{FE} Classifications Symbol

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

Temperature Profile for IR Reflow Soldering(Pb-Free)



	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.

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

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm^3)		
	只 卷盘	卷盘 盒	只 盒	盒 箱	只 箱		盒	箱