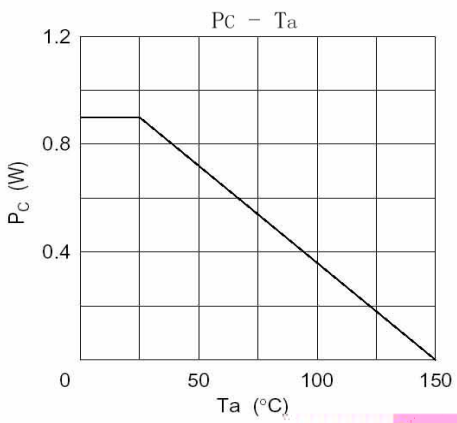
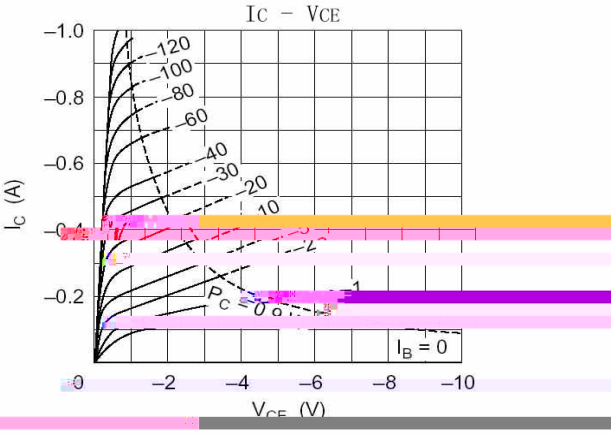
Parameter	Symbol		Rating	Unit
Collector to Base Voltage	V_{CBO}		-120	V
Collector to Emitter Voltage	V_{CEO}	2SB647T	-80	V
		2SB647AT	-100	
Emitter to Base Voltage	V_{EBO}		-5.0	V
Collector Current (DC)	I_C		-1.0	A
Collector Current(Pulse)	I_{CP}		-2.0	A
Collector Power Dissipation	P_C		500	mW
Collector Power Dissipation*	$*P_C$		1.0	W
Junction Temperature	T_j		150	
Storage Temperature Range	T_{stg}		-55 150	

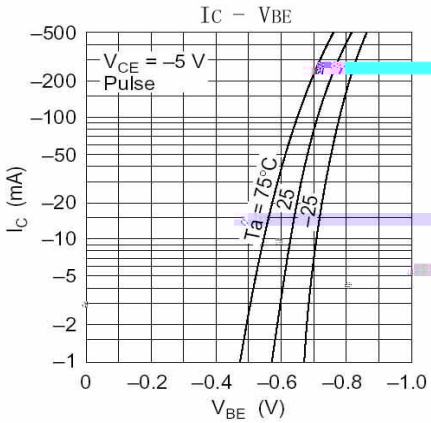
*:mounted on ceramic substrate(250mm^2×0.8t).

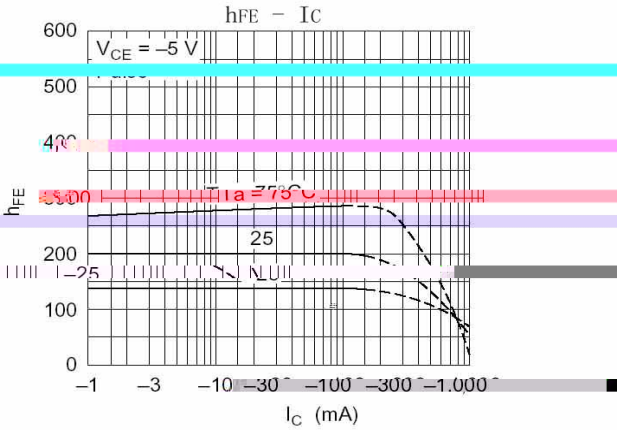
* 250mm^2×0.8t

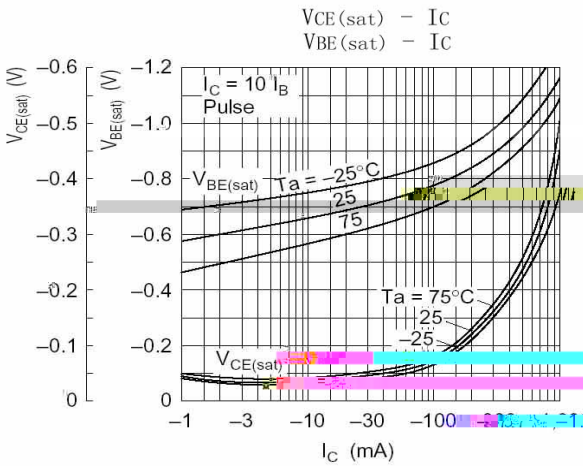
Parameter	Symbol		Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}		I_C=-10μA I_E=0	-120			V
Collector to Emitter Breakdown Voltage	V_{CEO}	2SB647T	I_C=-1.0mA R_{BE}=∞	-80			V
		2SB647AT		-100			
Emitter to Base Breakdown Voltage	V_{EBO}		I_E=-10μA I_C=0	-5.0			V
Collector Cut-Off Current	I_{CBO}		V_{CB}=-100V I_E=0			-10	μA
DC Current Gain	$h_{FE(1)}$		V_{CE}=-5.0V I_C=-150mA	60		320	
	$h_{FE(2)}$		V_{CE}=-5.0V I_C=-500mA	30			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$		I_C=-500mA I_B=-50mA			-1.0	V
Base to Emitter Voltage	V_{BE}		V_{CE}=-5.0V I_C=-150mA			-1.5	V
Transition Frequency	f_T		V_{CE}=-5.0V I_C=-150mA		140		MHz
Collector Output Capacitance	C_{ob}		V_{CB}=-10V I_E=0 f=1.0MHz		12		pF

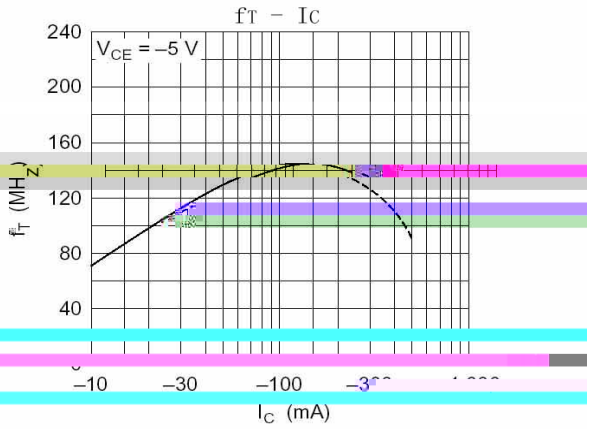

PC – Ta
PC (W)
Ta (°C)


IC – VCE
IC (A)
VCE (V)
IB = 0


IC – VBE
VCE = –5 V
Pulse
IC (mA)
VBE (V)

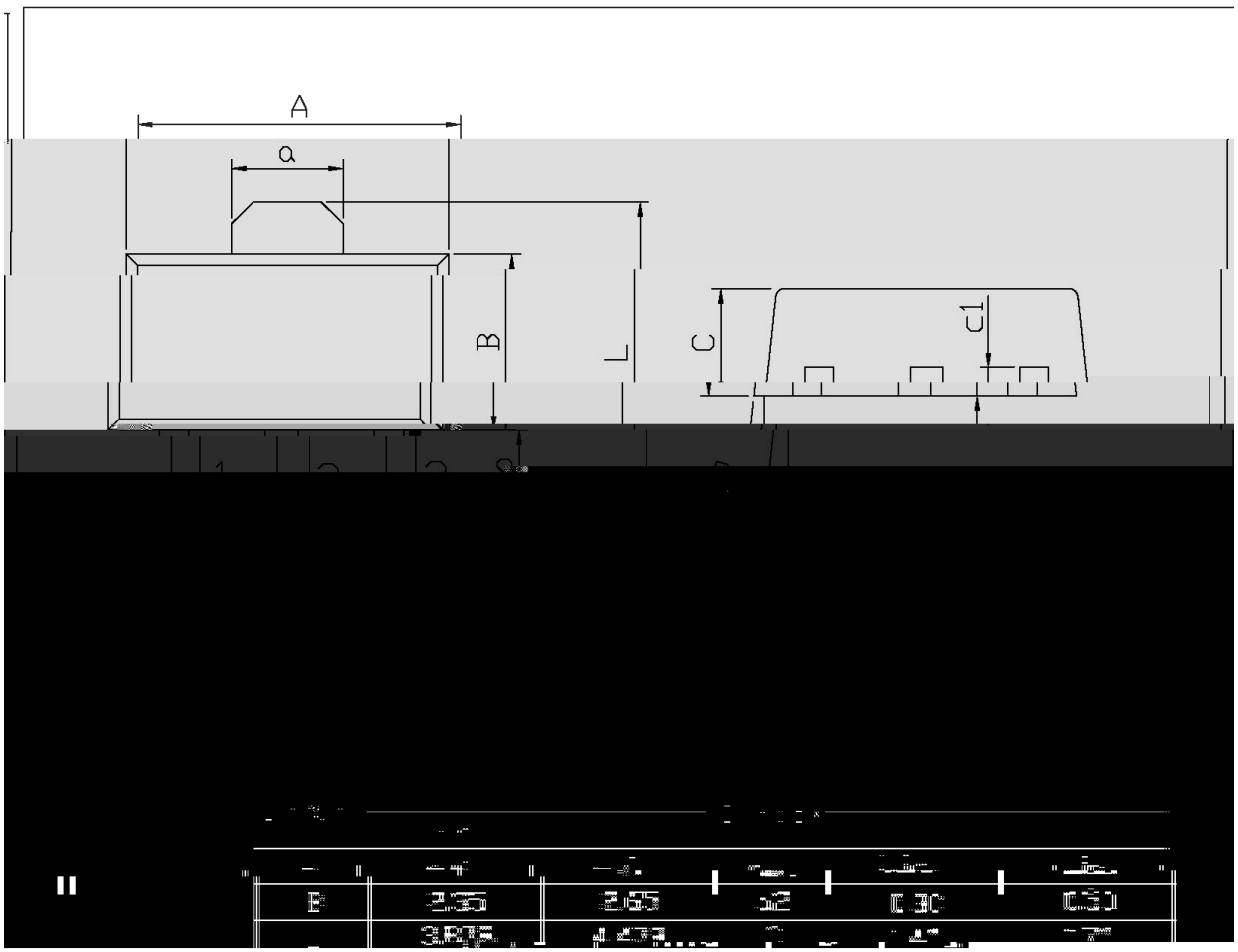

hFE – IC
VCE = –5 V
hFE
IC (mA)

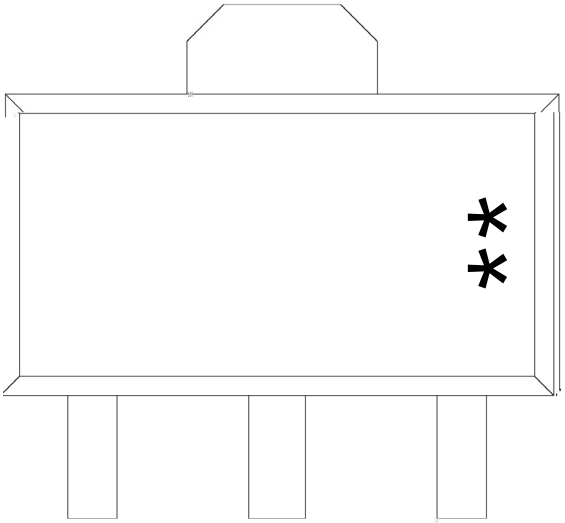

VCE(sat) – IC
VBE(sat) – IC
IC = 10 IB
Pulse
VCE(sat) (V)
VBE(sat) (V)
IC (mA)


fT – IC
VCE = –5 V
fT (MHz)
IC (mA)

SOT-89

单位：mm





H:

47

B: h_{FE}

****

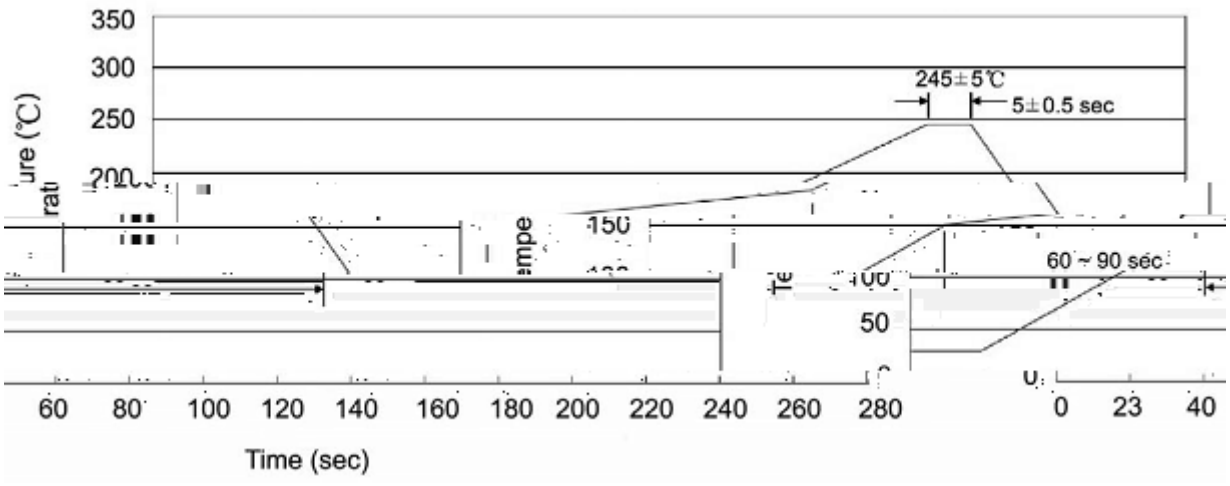
Note:

H: Company Code.

47: Product Type.

B: h_{FE} Classifications Symbol

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



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)		
	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