

/ Descriptions

Silicon PNP transistor in a SOT-89 Plastic Package.

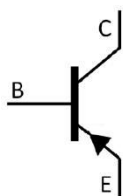
/ Features

High voltage, complementary Pair with MMBT5551T.

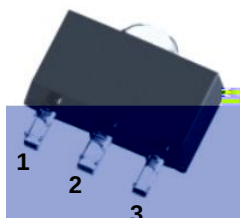
/ Applications

General purpose high voltage amplifier.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

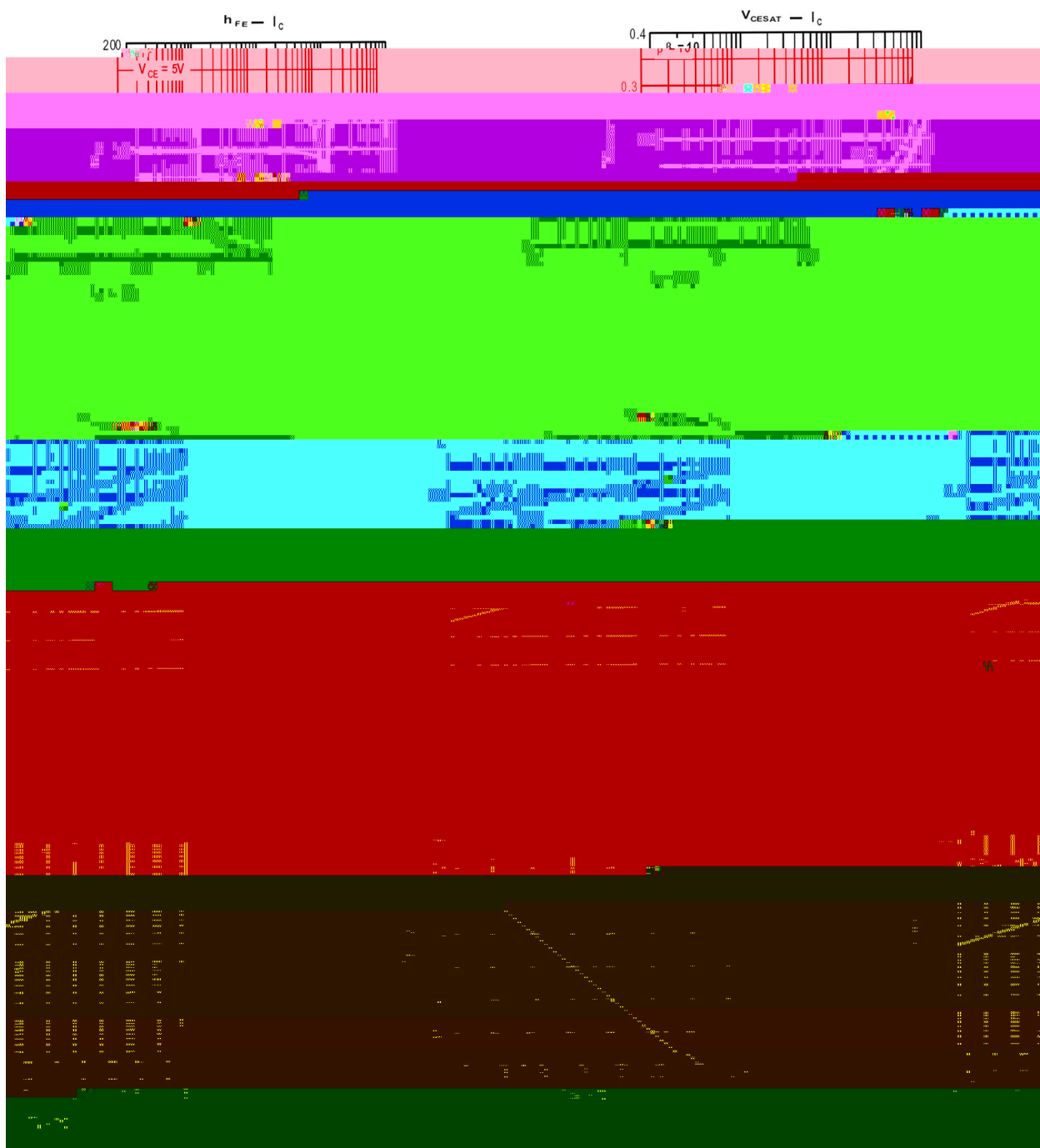
/ Marking

h_{FE} Classifications Symbol	A	B	C
h_{FE} Range	50 150	100 300	200 400
Marking	H2LA	H2LB	H2LC

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-180	V
Collector to Emitter Voltage	V_{CEO}	-160	V
Emitter to Base Voltage	V_{EBO}	-6.0	V
Collector Current - Continuous	I_C	-600	mA
Collector Base - Continuous	I_B	-300	mA
Collector Power Dissipation	P_C	500	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 150	°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-180V$ $I_E=0$			-0.1	μA
Emitter Base Cut-Off Current	I_{EBO}	$V_{EB}=-6.0V$ $I_C=0$			-0.1	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-5.0V$ $I_C=-10mA$	50	200	400	
	$h_{FE(2)}$	$V_{CE}=-5.0V$ $I_C=-50mA$	20	70		
	$h_{FE(3)}$	$V_{CE}=-5.0V$ $I_C=-1.0mA$	40	180		
Collector to Emitter Saturation Voltage	$V_{CE(sat) (1)}$	$I_C=-10mA$ $I_B=-1.0mA$		-0.12	-0.4	V
	$V_{CE(sat) (2)}$	$I_C=-50mA$ $I_B=-5.0mA$		-0.5	-0.8	V
Emitter to Base Saturation Voltage	$V_{BE(sat) (1)}$	$I_C=-10mA$ $I_B=-1.0mA$		-0.75	-1.0	V
	$V_{BE(sat) (2)}$	$I_C=-50mA$ $I_B=-5.0mA$		-0.8	-1.0	V
Emitter to Base Voltage	V_{BE}	$V_{CE}=-5.0V$ $I_C=-10mA$		-0.7	-0.75	V
Transition Frequency	f_T	$V_{CE}=-10V$ $I_E=10mA$	50	80		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=-10V$ $I_E=0$ $f=10MHz$		2.5	5.0	pF
Turn-on Time	t_{on}	$I_C=-100Ma$ $-I_{B1}=I_{B2}=-10mA$		0.1		μs
Turn-off Time	t_{off}			0.2		μs
Storage Time	t_{stg}			0.1		μs

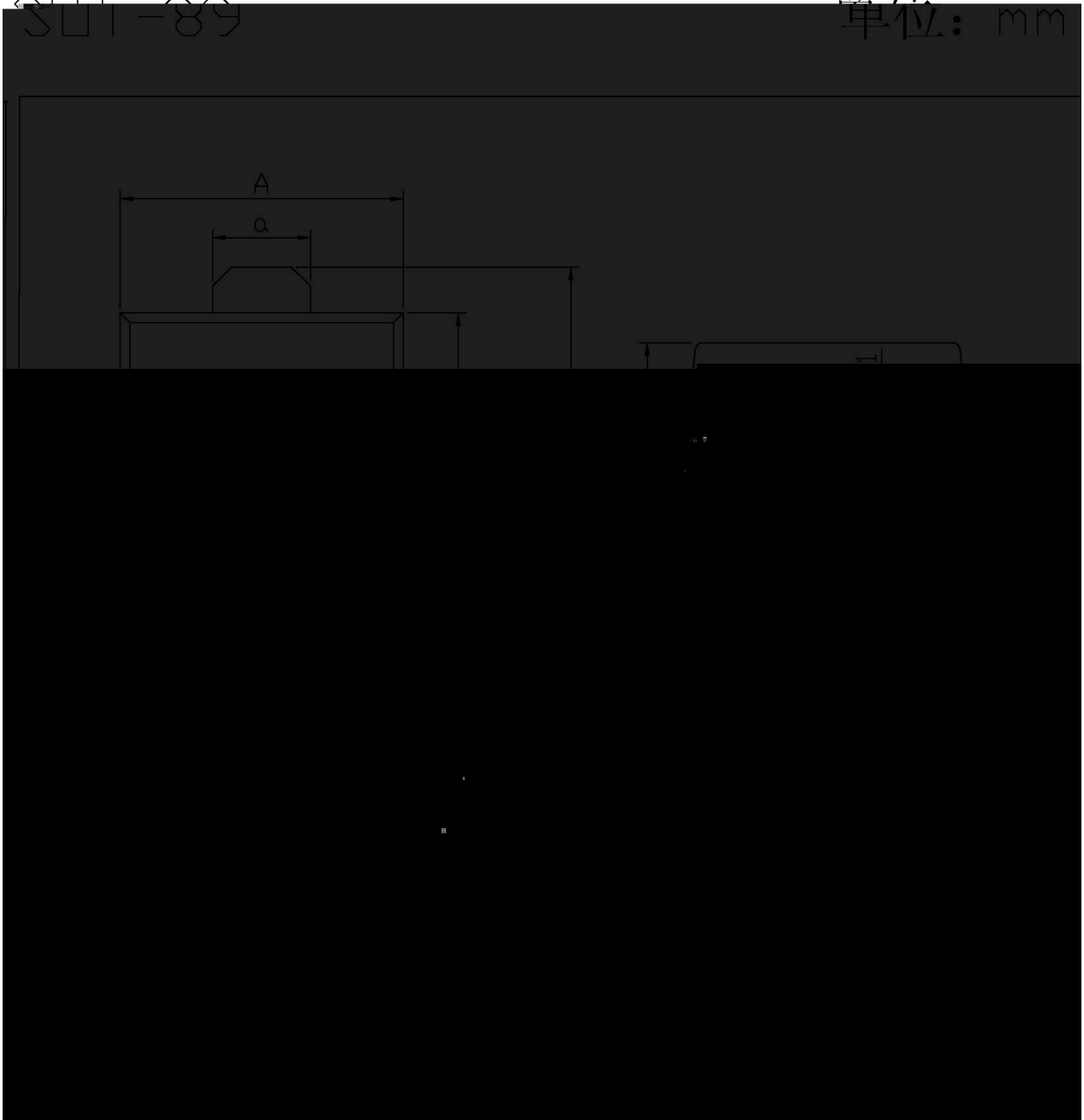
/ Electrical Characteristic Curve



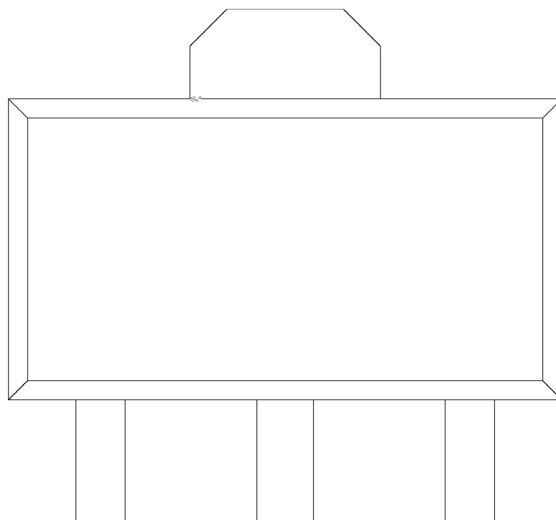
/ Package Dimensions

SOT-89

单位: mm



/ Marking Instructions



H

2L

A: h_{FE}

Note:

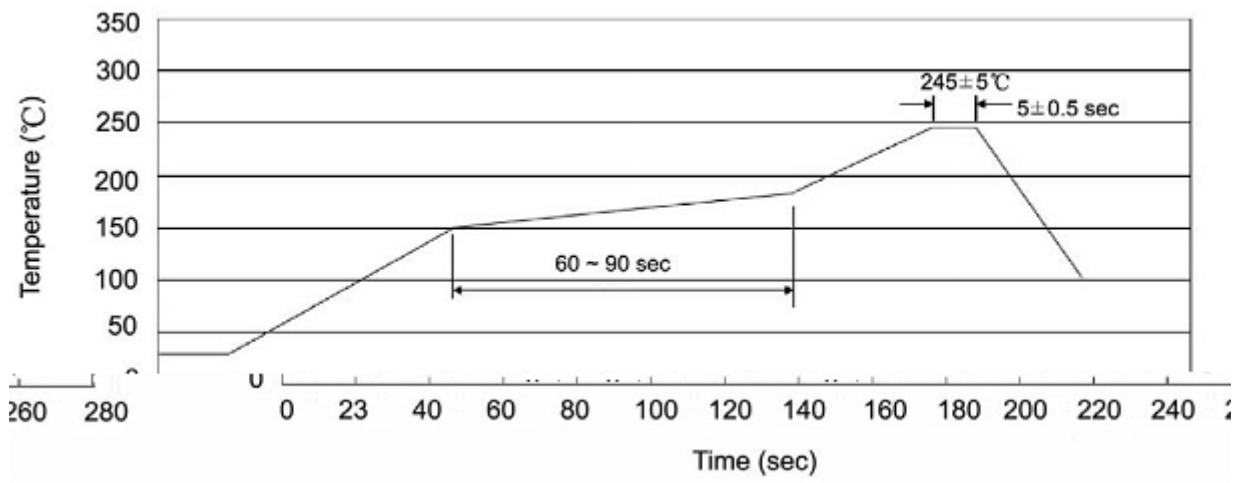
H: Company Code.

2L: Product Type.

A: h_{FE} Classifications Symbol

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

() / Whp shudwxuh Suriloh i ru LU Uhior z Vroghulqj+Se0l uhh,



Note:

- 1

25 150

60 90sec;
- 2

245 5

5 0.5sec;
- 3

2 10

/sec.
- 1.Preheating:25~150

, Time:60~90sec.
- 2.Peak Temp.:245 5

, Duration:5 0.5sec.
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	Units					Dimension (unit mm ³)		
	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

/ Notices