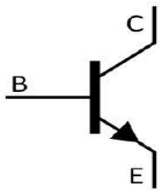


SOT-23 NPN Silicon NPN transistor in a SOT-23 Plastic Package.

High current.

General power amplifier.

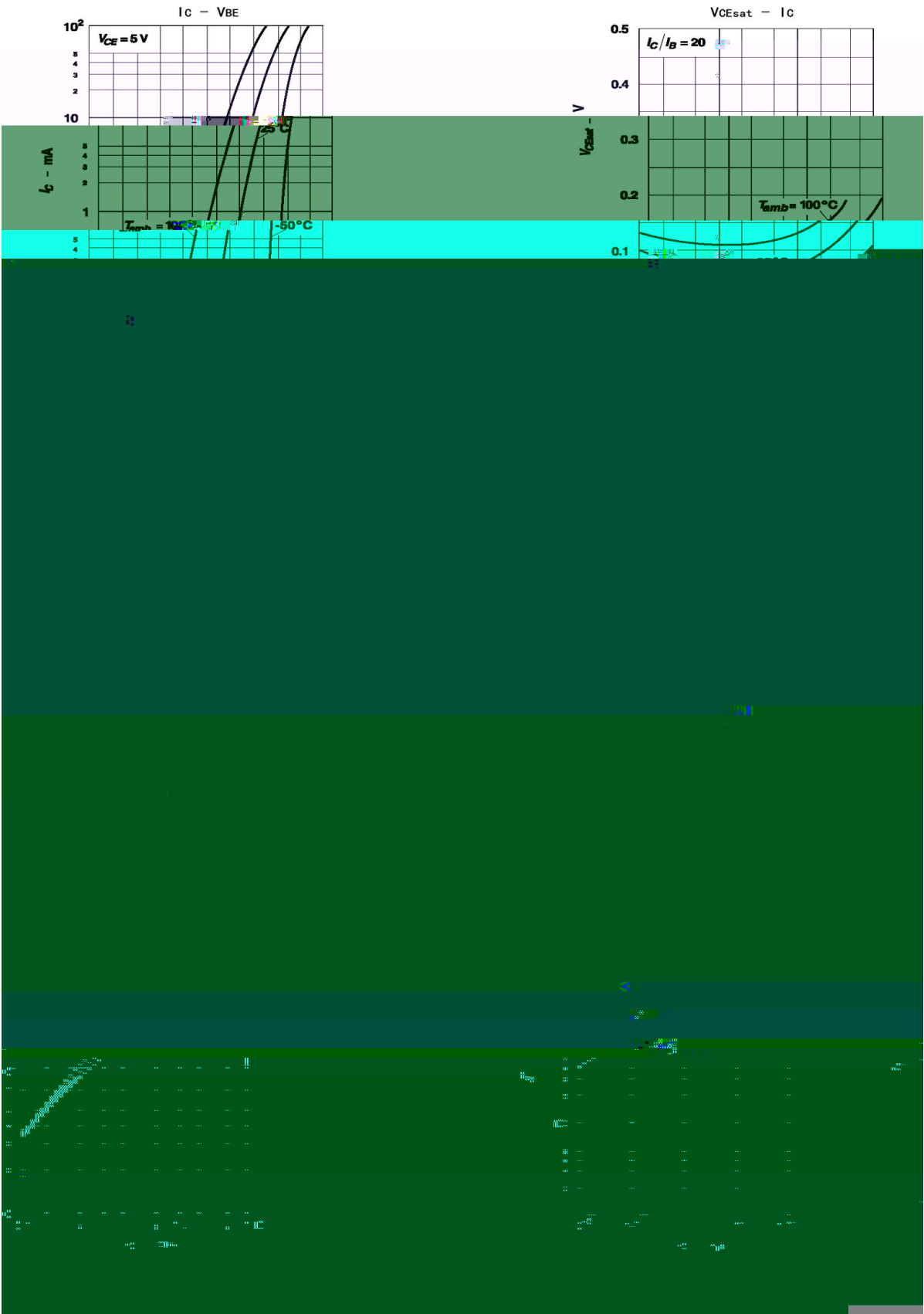


PIN1 Base PIN 2 Emitter PIN 3 Collector

h_{FE} Range	100 300
Marking	HC3A

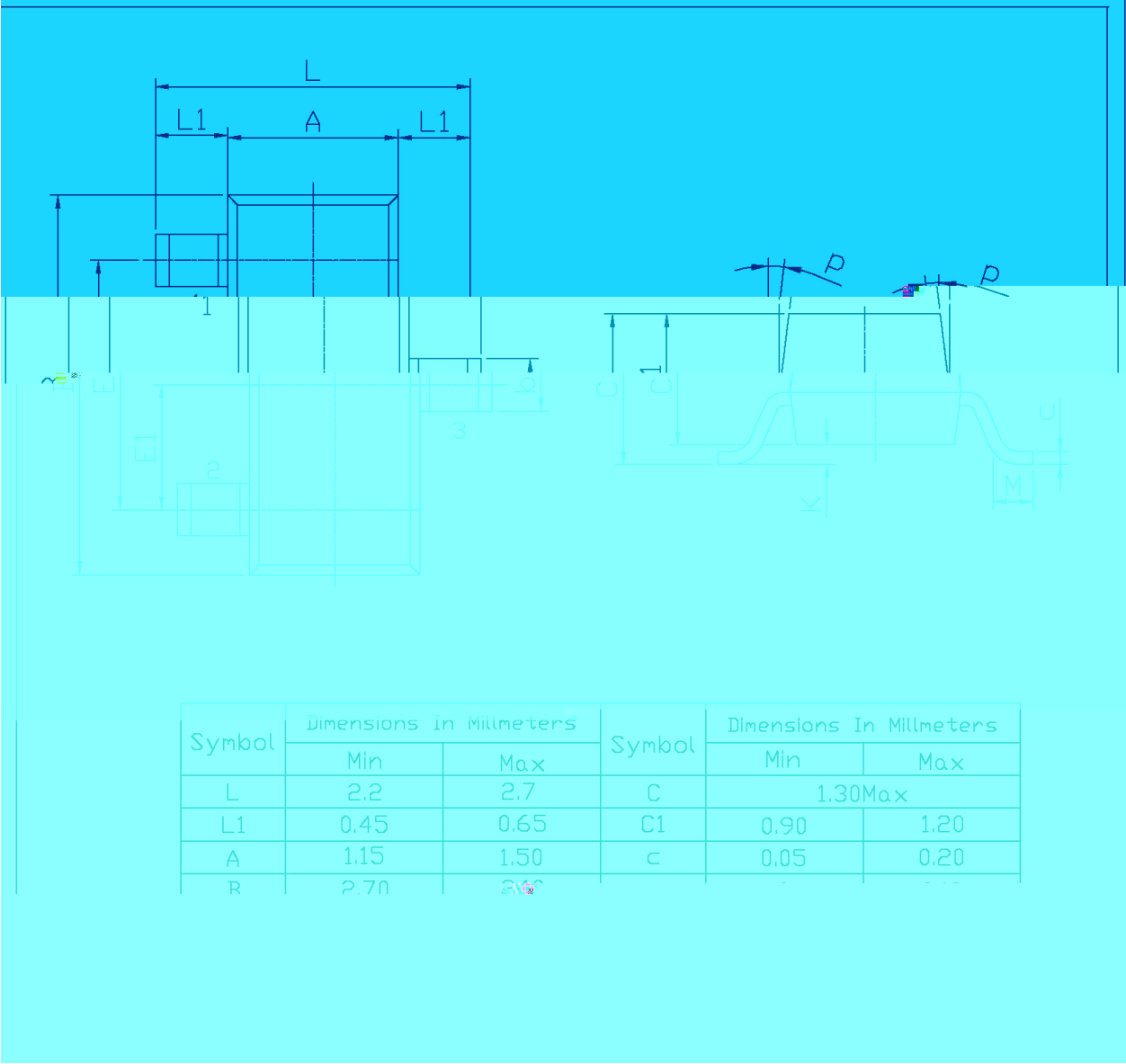
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	120	V
Collector to Emitter Voltage	V_{CEO}	80	V
Emitter to Base Voltage	V_{EBO}	7.0	V
Collector Current - Continuous	I_C	500	mA
Peak Collector Current - Continuous	I_{CM}	1.0	A
Collector Power Dissipation	P_C	350	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

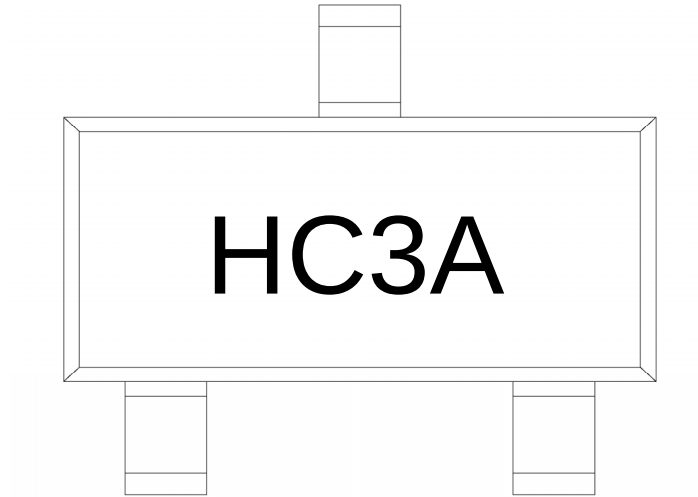
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=100\mu A$ $I_E=0$	120			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=30mA$ $I_B=0$	80			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=100\mu A$ $I_C=0$	7.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=90V$ $I_E=0$			0.01	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=5.0V$ $I_C=0$			0.01	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=10V$ $I_C=150mA$	100		300	
	$h_{FE(2)}$	$V_{CE}=10V$ $I_C=500mA$	50			
	$h_{FE(3)}$	$V_{CE}=10V$ $I_C=10mA$	90			
	$h_{FE(4)}$	$V_{CE}=10V$ $I_C=0.1mA$	50			
Collector to Emitter Saturation Voltage	$V_{CE(sat)(1)}$	$I_C=150mA$ $I_B=15mA$			0.2	V
	$V_{CE(sat)(2)}$	$I_C=500mA$ $I_B=50mA$			0.5	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=150mA$ $I_B=15mA$			1.1	V
Transition Frequency	f_T	$V_{CE}=10V$ $f=1.0MHz$ $I_C=50mA$	100			MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V$ $f=1.0MHz$ $I_E=0$			12	pF
Collector Input Capacitance	C_{ib}	$V_{EB}=0.5V$ $f=1.0MHz$ $I_C=0$			60	pF
Noise Figure	NF	$V_{CB}=10V$ $I_C=100mA$ $R_s=1K\Omega$ $f=1.0KHz$			4.0	dB



SOT-23

单位: mm





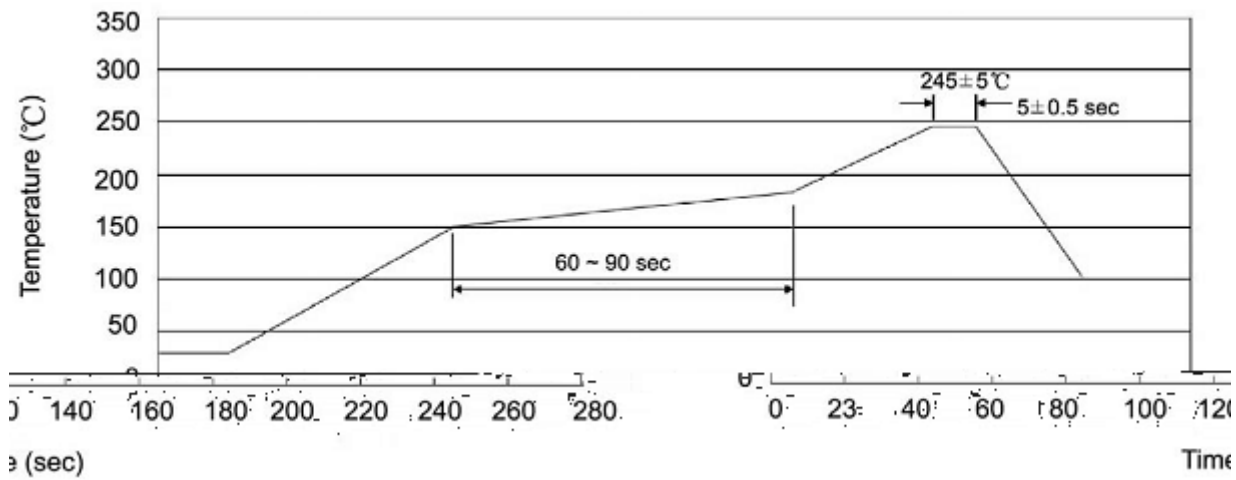
H

C3A

Note:

H: Company Code.

C3A: Product Type Code.



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.

260±5

10±1 sec.

Temp.:260±5

Time:10±1 sec

/ REEL

Package Type	Units					Dimension		(unit mm ³)