

2SA1981S

Rev.F Apr.-2017

/ Descriptions

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

/ Features

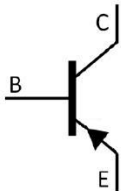
2SC5344S

High h_{FE} , complementary pair with 2SC5344S.

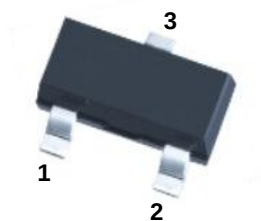
/ Applications

Audio power amplifier application.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Emitter PIN 3 Collector

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	O	Y
h_{FE} Range	100 200	160 320
Marking	HEAO	HEAY

/ Absolute Maximum Ratings(Ta=25)

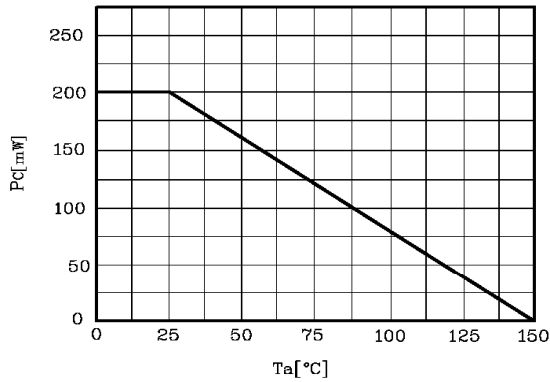
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-35	V
Collector to Emitter Voltage	V_{CEO}	-30	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current	I_C	-800	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

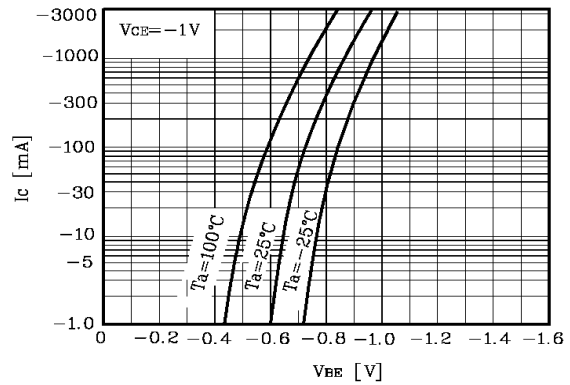
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	V_{CBO}	$I_C = -500\mu A$ $I_E = 0$	-35			V
Collector-Emitter breakdown Voltage	V_{CEO}	$I_C = -1.0mA$ $I_B = 0$	-30			V
Emitter-Base Breakdown Voltage	V_{EBO}	$I_E = -50\mu A$ $I_C = 0$	-5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB} = -35V$ $I_E = 0$			-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}	$V_{CE} = -1.0V$ $I_C = -100mA$	100		320	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -500mA$ $I_B = -20mA$			-0.5	V
Transition Frequency	f_T	$V_{CE} = -5.0V$ $I_E = -10mA$		120		MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10V$ $f = 1.0MHz$ $I_E = 0$		19		pF

/ Electrical Characteristic Curve

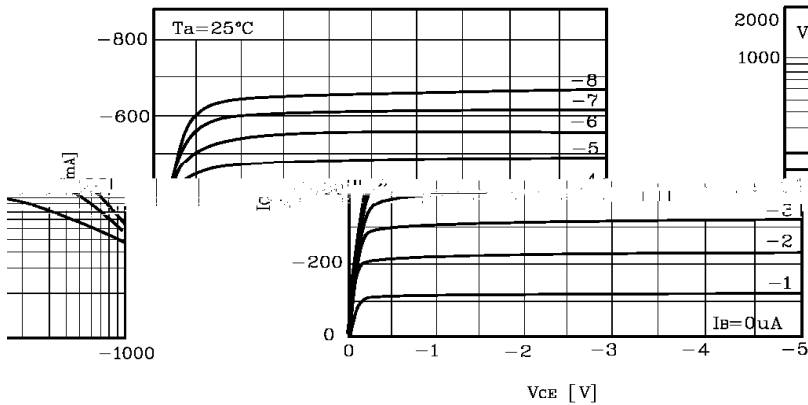
Pc-Ta



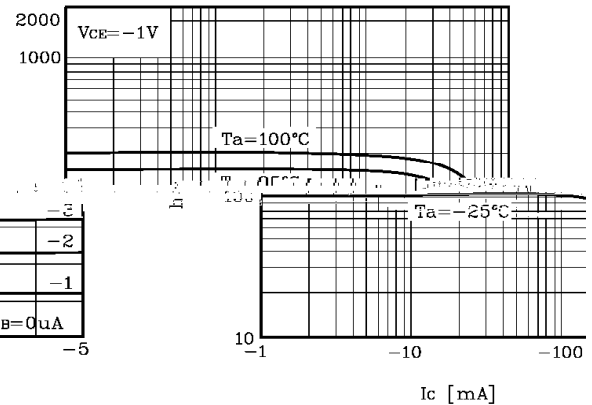
IC - V_{BE}



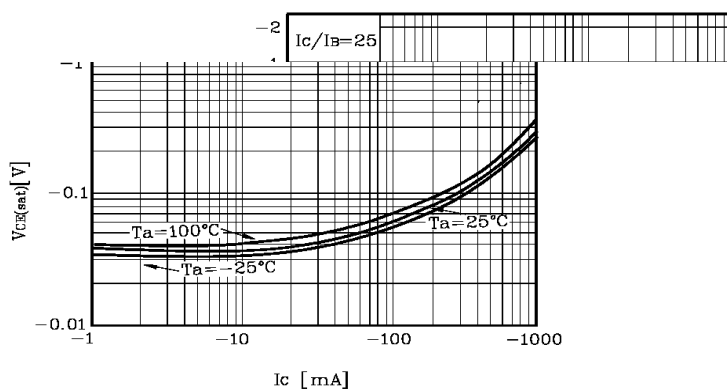
IC - V_{CE}



h_{FE} - IC



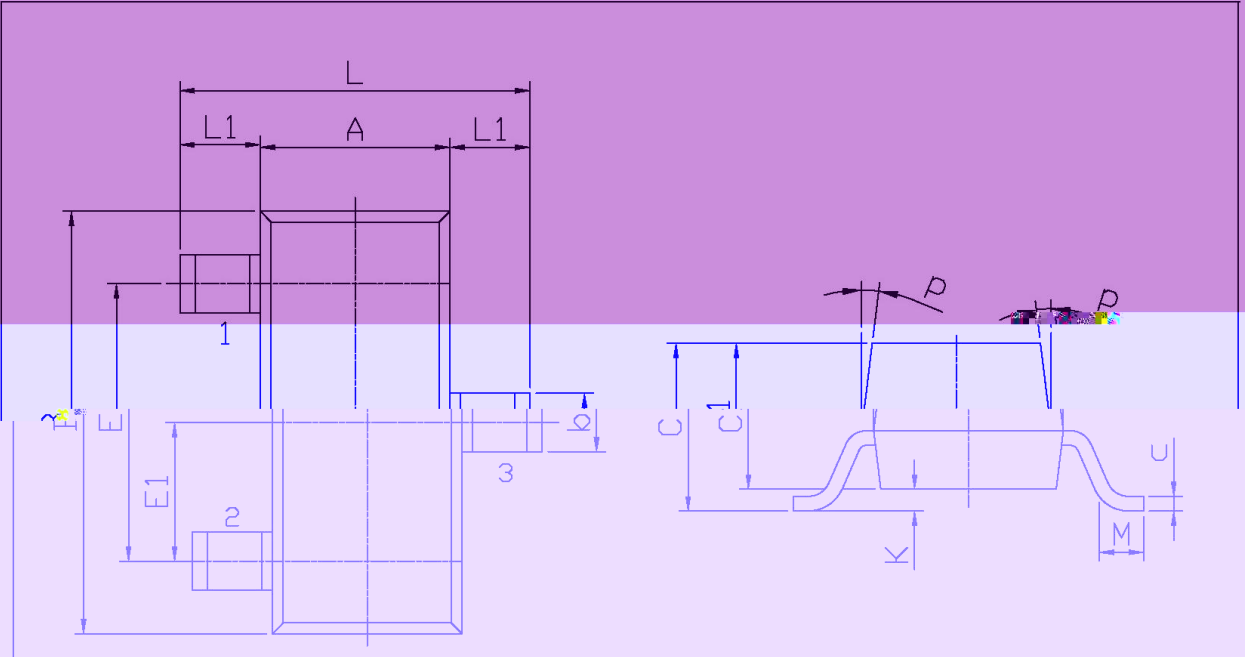
CE(SAT) - IC



/ Package Dimensions

SOT-23

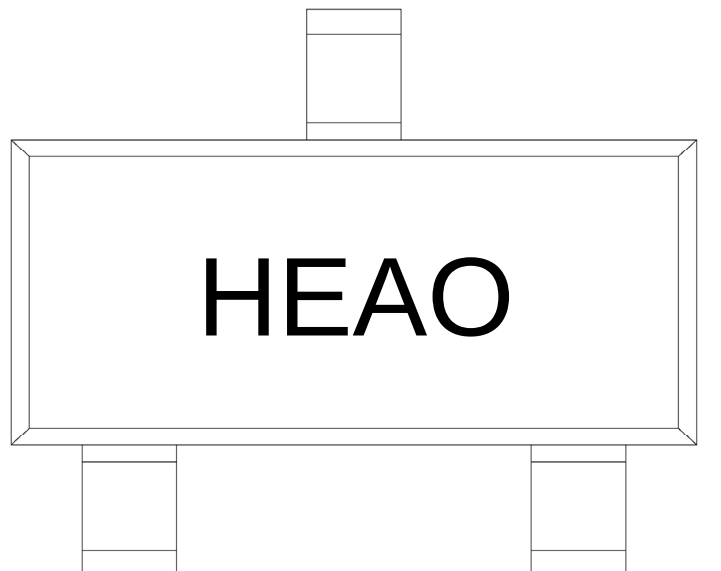
单位: mm



Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
L	2.2	2.7	C	1.30Max	
L1	0.45	0.65	C1	0.18Max	

A	1.15	1.50	C	0.05	0.20				
R	2.70	2.10							

/ Marking Instructions



H

EA

O: h_{FE}

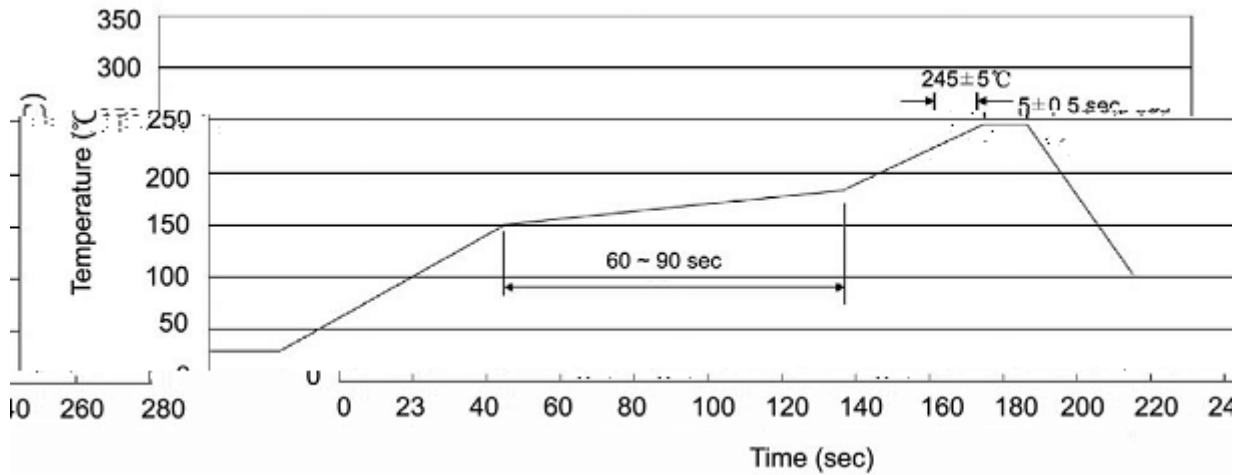
Note:

H: Company Code.

EA: Product Type Code

O: h_{FE} Classifications Symbol Code

() / 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. | |

/ Resistance to Soldering Heat Test Conditions

260±5

10±1 sec.

Temp.:260±5

Time:10±1 sec

/ Packaging SPEC.

/ REEL

Units 包装数量

Dimension 包装尺寸 (unit: mm)