

2SB1197K

Rev.F Apr.-2017

/ Descriptions

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

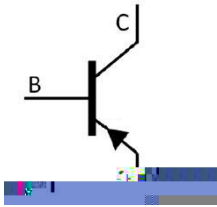
/ Features

 , 2SD1781K
Low $V_{CE(sat)}$, complements the 2SD1781K.

/ Applications

Low frequency amplifier applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Emitter PIN 3 Collector

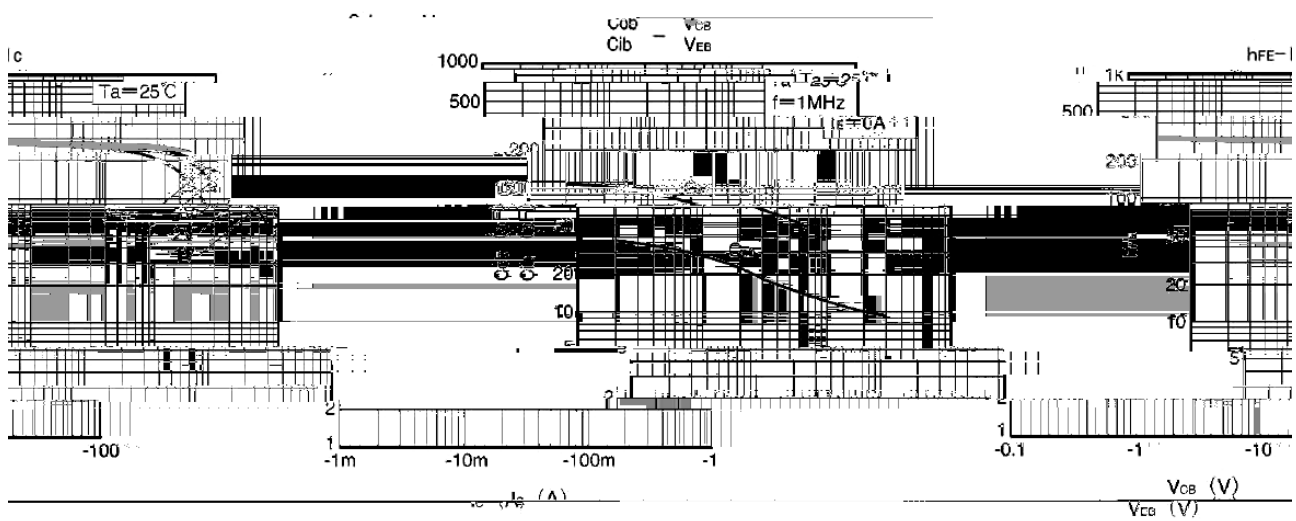
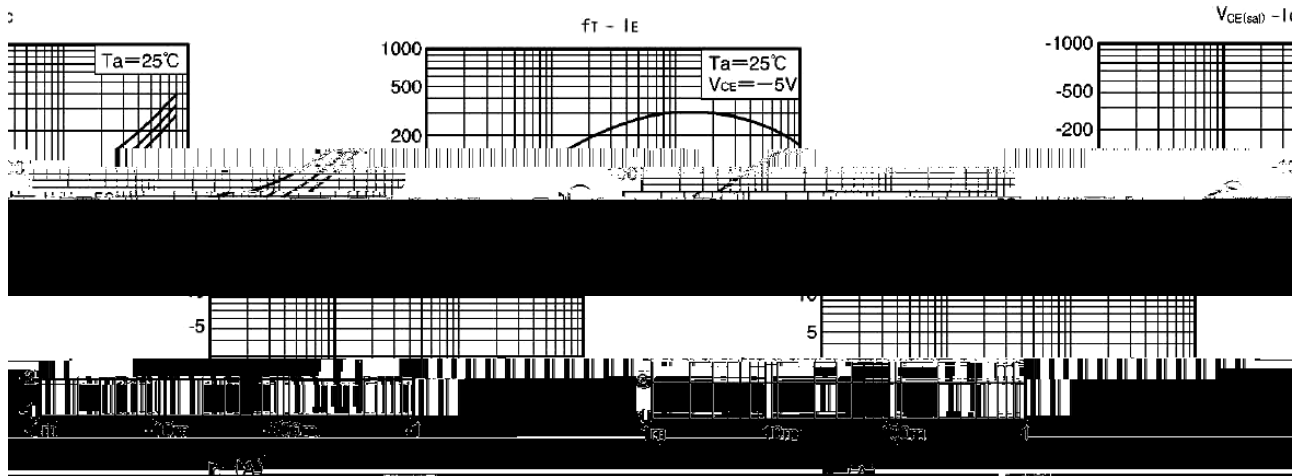
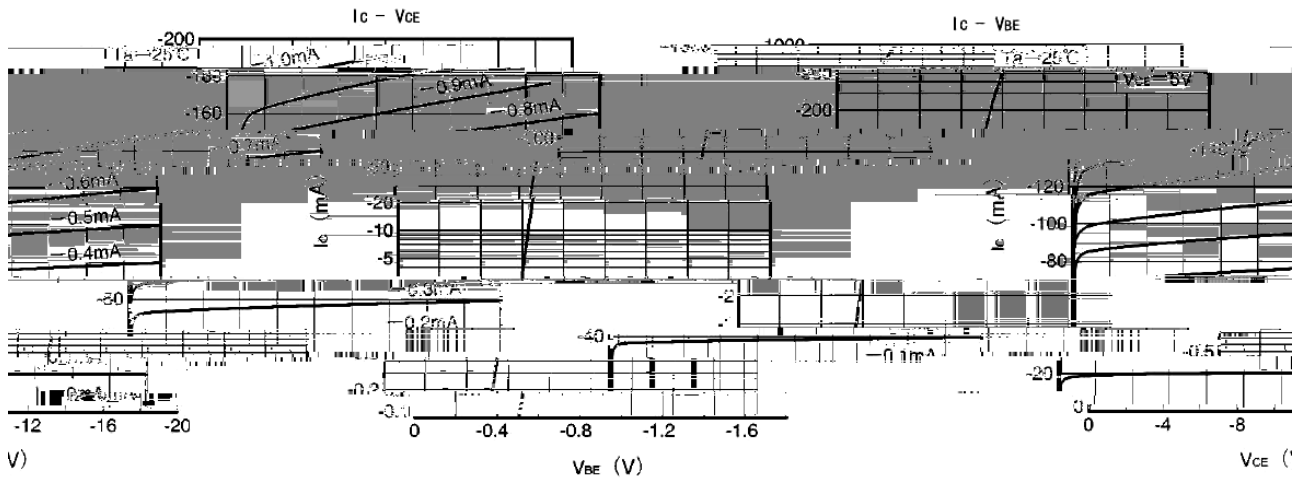
/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	Q	R
h_{FE} Range	120 270	180 390
Marking	HAHQ	HAHR

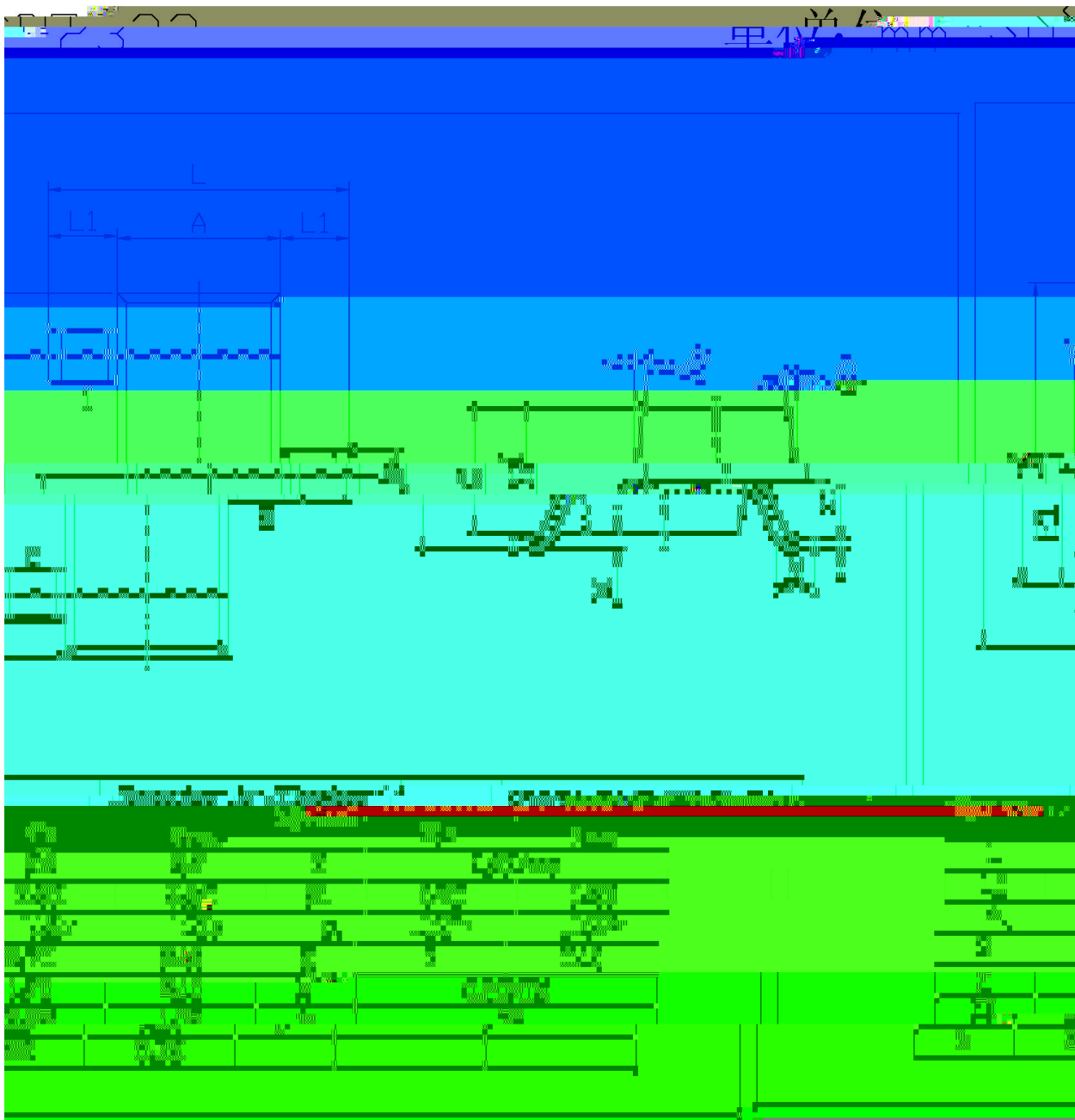
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-40	V
Collector to Emitter Voltage	V_{CEO}	-32	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current	I_C	-800	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	V_{CBO}	$I_C = -50 \text{ A}$	-40			V
Collector-Emitter Breakdown Voltage	V_{CEO}	$I_C = -1.0 \text{ mA}$	-32			V
Emitter-Base Breakdown Voltage	V_{EBO}	$I_E = -50 \text{ A}$	-5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB} = -20 \text{ V} \quad I_E = 0$			-0.5	A
Emitter Base Cut-Off Current	I_{EBO}	$V_{EB} = -5 \text{ V} \quad I_C = 0$			-0.5	A
DC Current Gain	h_{FE}	$V_{CE} = -3.0 \text{ V} \quad I_C = -100 \text{ mA}$	120		390	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C				

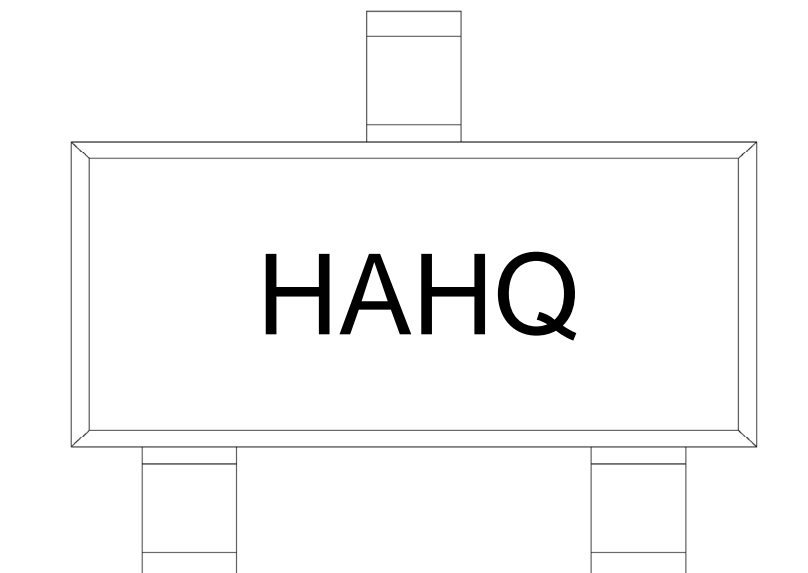
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



H

AH

Q: h_{FE}

Note:

H: Company Code

AH: Product Type Code

Q: h_{FE} Classifications Symbol Code

() / Temperature Profile for IR Reflow Soldering(PbO