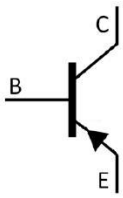
SOT-23 PNP Silicon PNP transistor in a SOT-23 Plastic Package.

Low collector to emitter saturation voltage, excellent linearity of DC forward current Gain, high collector current, high gain band width product.

Small type motor drive, relay drive, power supply.

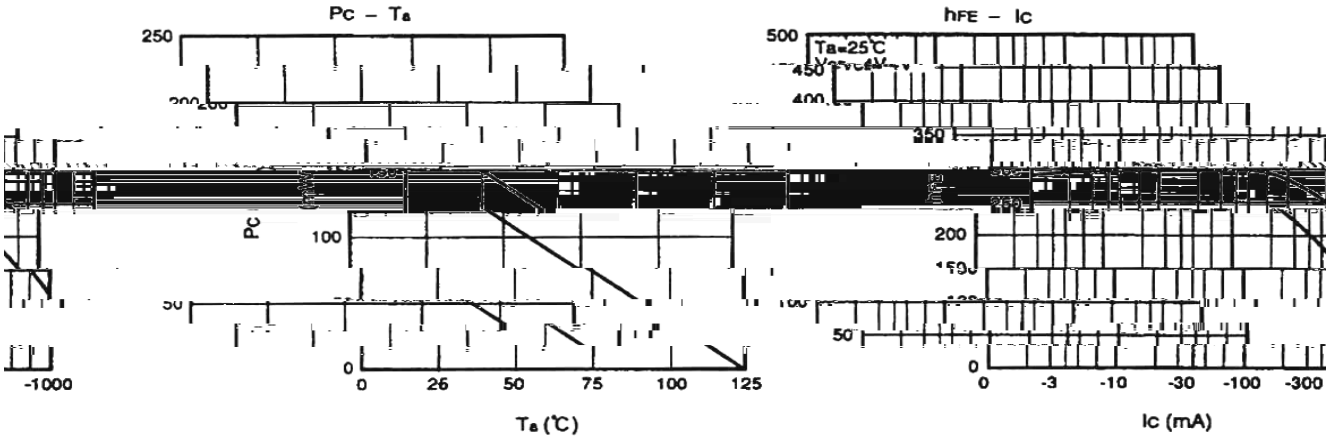


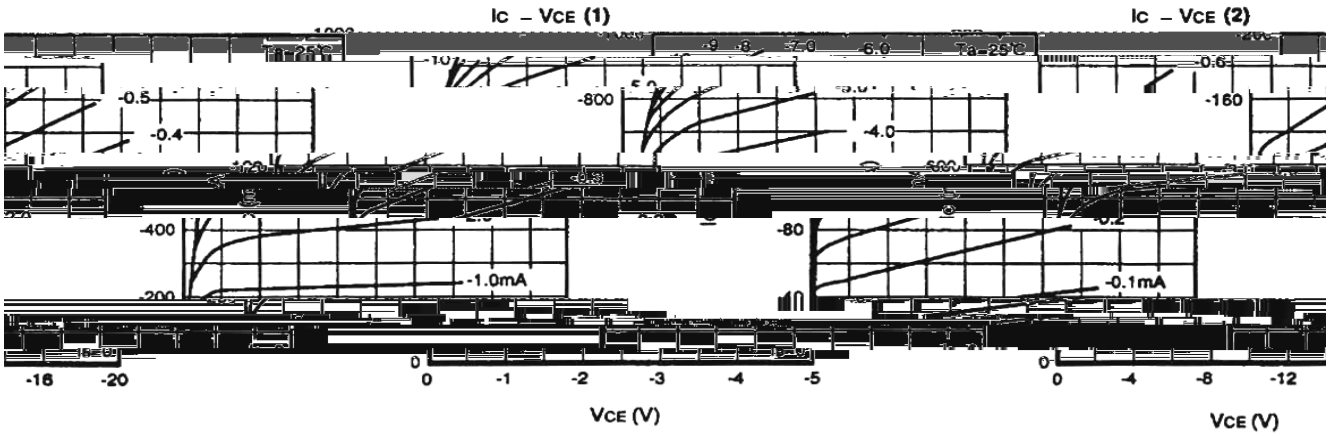
PIN1 Base PIN 2 Emitter PIN 3 Collector

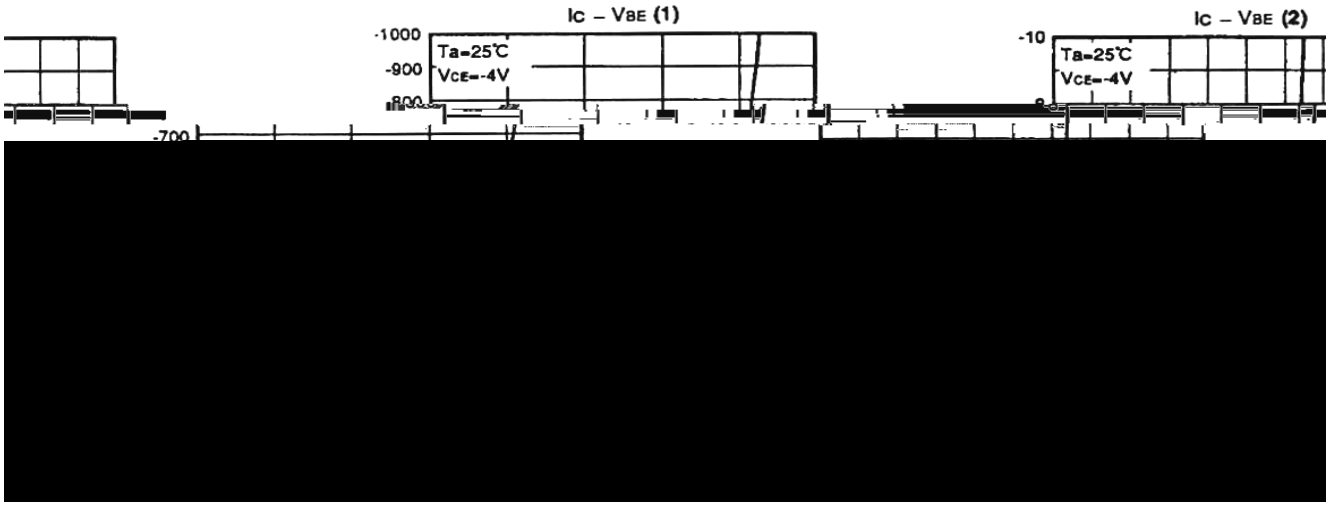
h_{FE} Classifications Symbol	E	F	G
h_{FE} Range	150 300	250 500	400 800
Marking	HAE	HAF	HAG

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-25	V
Collector to Emitter Voltage	V_{CEO}	-20	V
Emitter to Base Voltage	V_{EBO}	-4.0	V
Collector Current	I_C	-700	mA
Peak Current	I_{CM}	-1.0	A
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

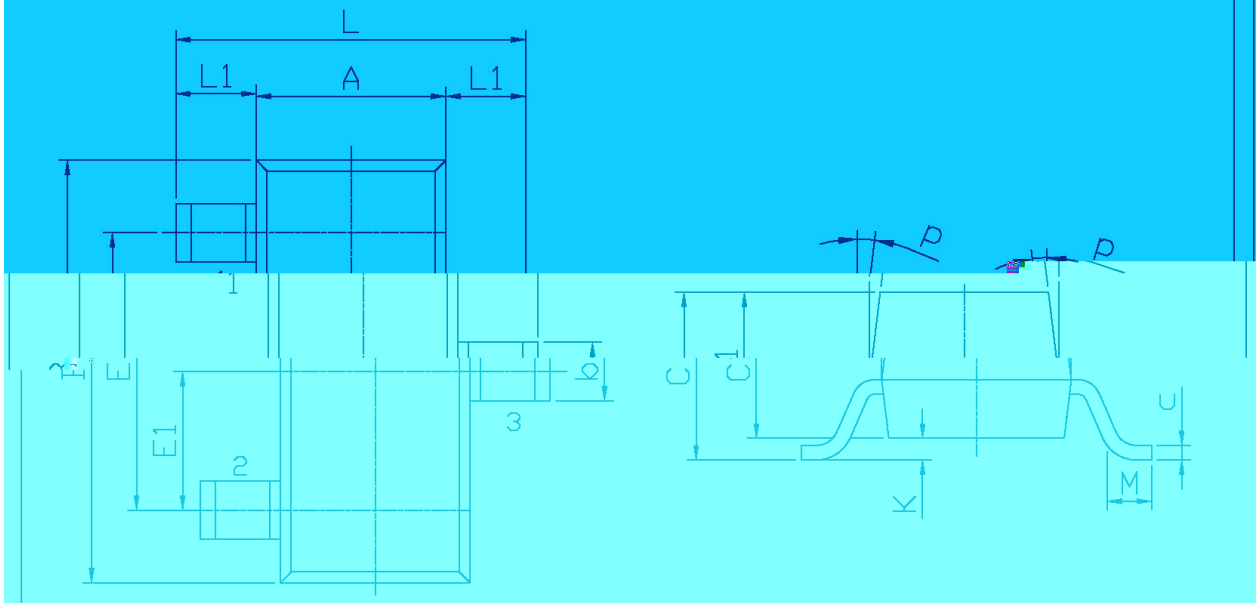
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	V_{CBO}	I_C=-10 A I_E=0	-25			V
Collector-Emitter Breakdown Voltage	V_{CEO}	I_C=-100 A R_{BE}=	-20			V
Emitter-Base Breakdown Voltage	V_{EBO}	I_E=-10 A I_c=0	-4.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=-25V I_E=0			-1.0	A
Emitter Base Cut-Off Current	I_{EBO}	V_{EB}=-2.0V I_c=0			-1.0	A
DC Current Gain	h_{FE}	V_{CE}=-4.0V I_C=-100mA	150		800	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-500mA I_B=-25mA		-0.2	-0.5	V
Transition Frequency	f_T	V_{CE}=-6.0V I_E=10mA		180		MHz


PC – Ta
250
100
50
0
-1000
0
26
50
75
100
125
PC
Ta (℃)
hFE – IC
500
450
400
350
200
50
0
-3
-10
-30
-100
-300
Ta=25℃
IC (mA)


IC – VCE (1)
-0.5
-0.4
-800
-4.0
-400
-200
-1.0mA
-16
-20
0
-1
-2
-3
-4
-5
VCE (V)
IC – VCE (2)
-0.6
-160
-80
-0.1mA
0
-4
-8
-12
VCE (V)


IC – VBE (1)
-1000
-900
-800
-700
Ta=25℃
VCE=-4V
IC – VBE (2)
-10
Ta=25℃
VCE=-4V

SOT-23 单位：mm



Symbol	Dimensions In Millmeters		Symbol	Dimensions In Millmeters	
	Min	Max		Min	Max
L	2.2	2.7	C	1.30Max	
L1	0.45	0.65	C1	0.90	1.20
A	1.15	1.50	c	0.05	0.20
B	2.70	[illegible]			

H

A

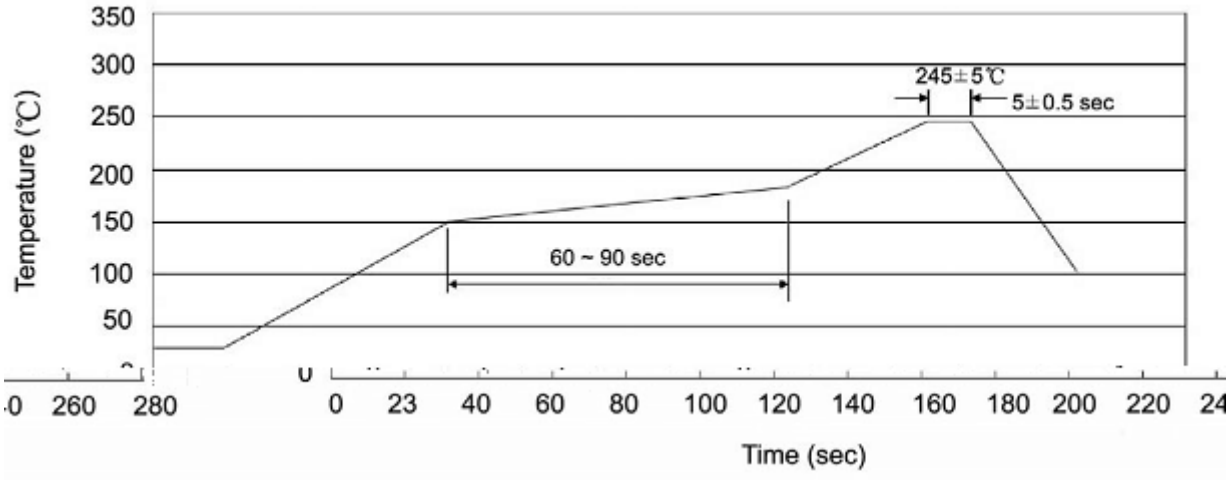
E: h_{FE}

Note:

H: Company Code.

A: Product Type Code

E: h_{FE} Classifications Symbol Code



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	Units					Dimension		(unit mm^3)