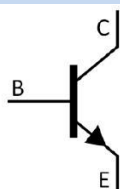


Rev.F Apr.-2017

Silicon NPN transistor in a SOT-23 Plastic Package.

High voltage and high current, excellent h_{FE} linearity ,low noise.

Audio frequency general purpose, driver stage amplifier applications.

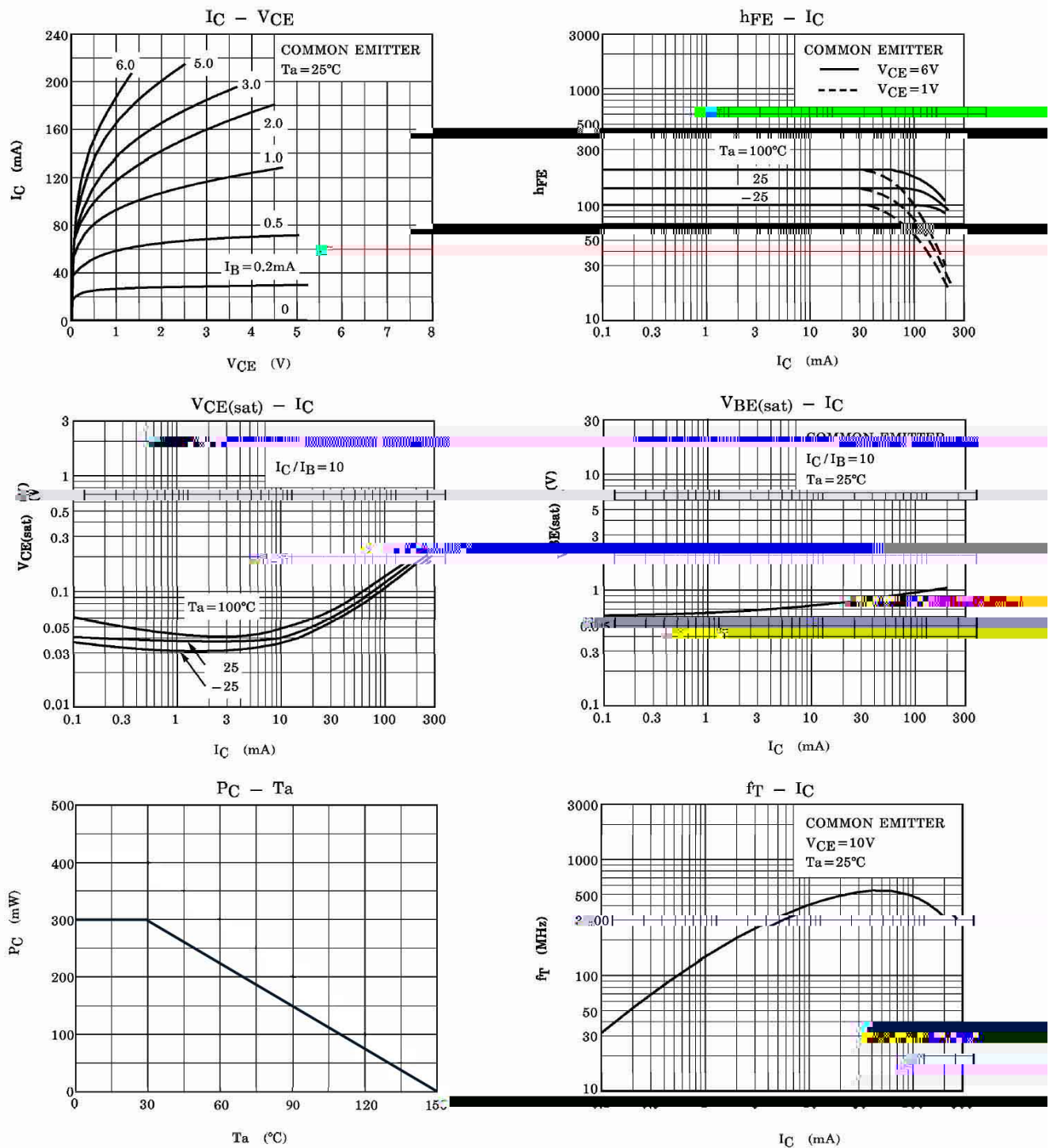


PIN1 Base PIN 2 Emitter PIN 3 Collector

h_{FE} Classifications Symbol	O	Y	GR	BL
h_{FE} Range	70 140	120 240	200 400	350 700
Marking	HHFO	HHFY	HHFG	HHFB

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	50	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current	I_C	150	mA
Base Current	I_B	50	mA
Collector Power Dissipation	P_C	300	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

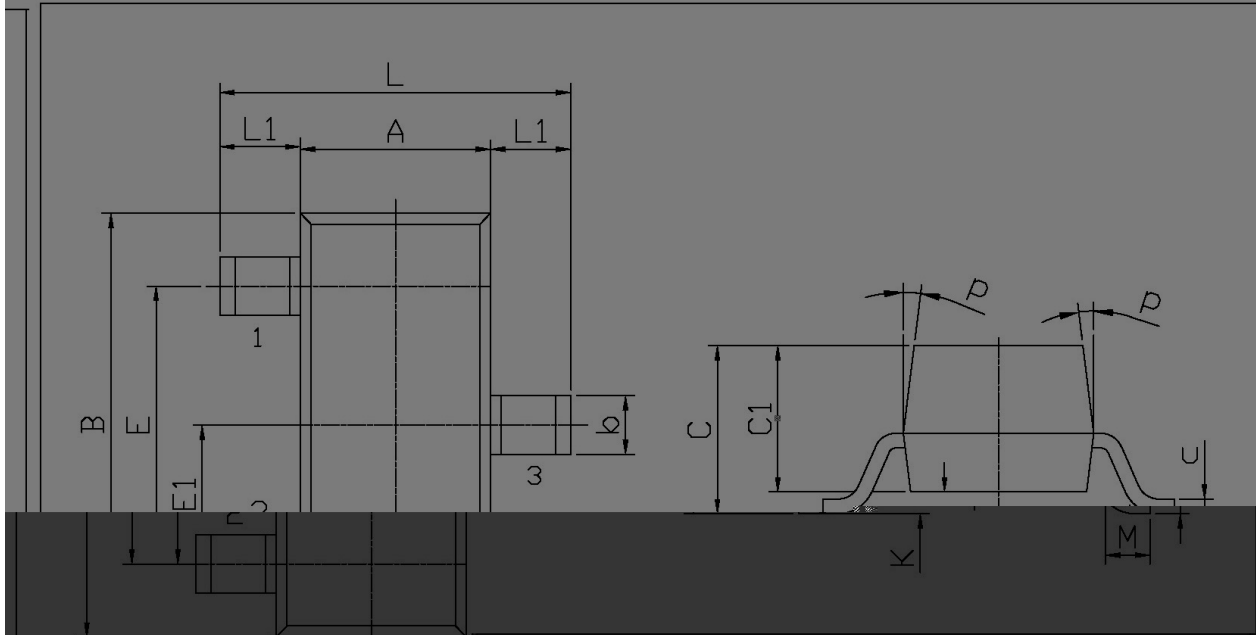
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	$V_{CB}=60V$ $I_E=0$			0.1	A
Emitter Base Cut-Off Current	I_{EBO}	$V_{EB}=5.0V$ $I_C=0$			0.1	A
DC Current Gain	$h_{FE(1)}$	$V_{CE}=6.0V$ $I_C=2.0mA$	70		700	
	$h_{FE(2)}$	$V_{CE}=6.0V$ $I_C=150mA$	25	100		
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100mA$ $I_B=10mA$		0.1	0.25	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=100mA$ $I_B=10mA$			1.0	V
Transition Frequency	f_T	$V_{CE}=10V$ $I_C=1.0mA$	80			MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V$ $f=1.0MHz$ $I_E=0$		2.0	3.5	pF
Base Intrinsic Resistance	$r_{bb'}$	$V_{CB}=10V$ $f=30MHz$ $I_C=1.0mA$		50		
Noise Figure	NF	$V_{CE}=6.0V$ $R_g=10K$ $I_C=0.1mA$ $f=1.0KHz$		1.0	10	dB



Rev.F Apr.-2017

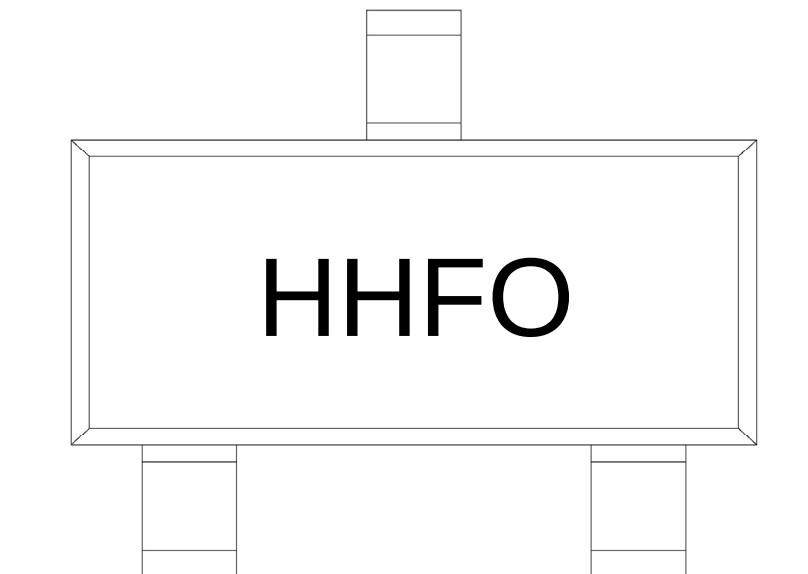
ST-23

单位: mm



Dimensions in Millimeters

Dimensions in Millimeters



h_{FE}

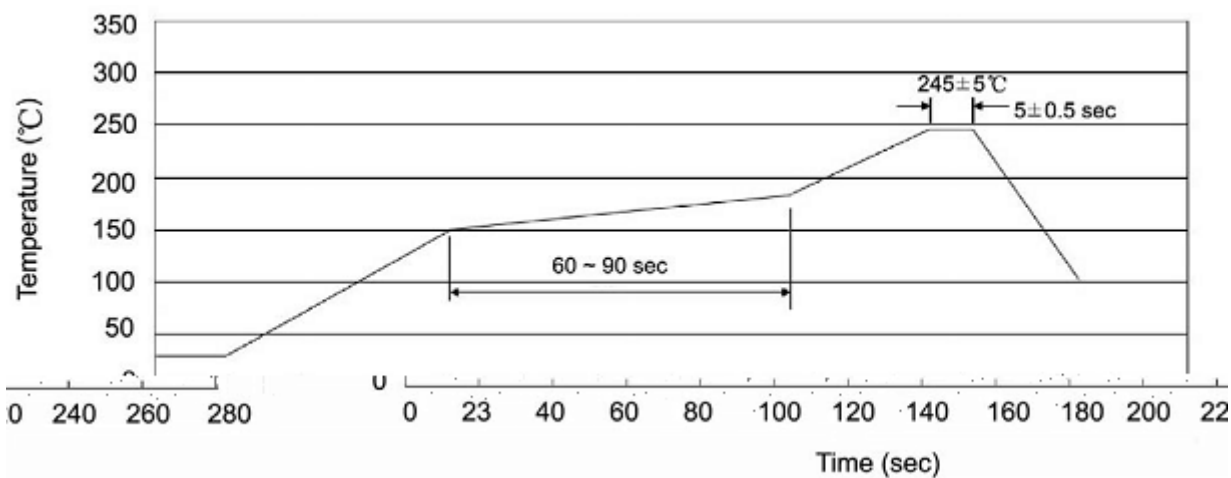
Note:

H: Company Code

HF: Product Type Code

O: h_{FE} Classifications Symbol Code

Rev.F Apr.-2017



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
-------	-----------	-------------	---------------