

# BF820

Rev.F Apr.-2017

## / Descriptions

SOT-23

NPN

Silicon NPN transistor in a SOT-23 Plastic Package.

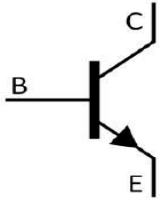
## / Features

Low current, high voltage.

## / Applications

Telephony and professional communication equipment.

## / Equivalent Circuit



## / Pinning



PIN1 Base

PIN 2 Emitter

PIN 3 Collector

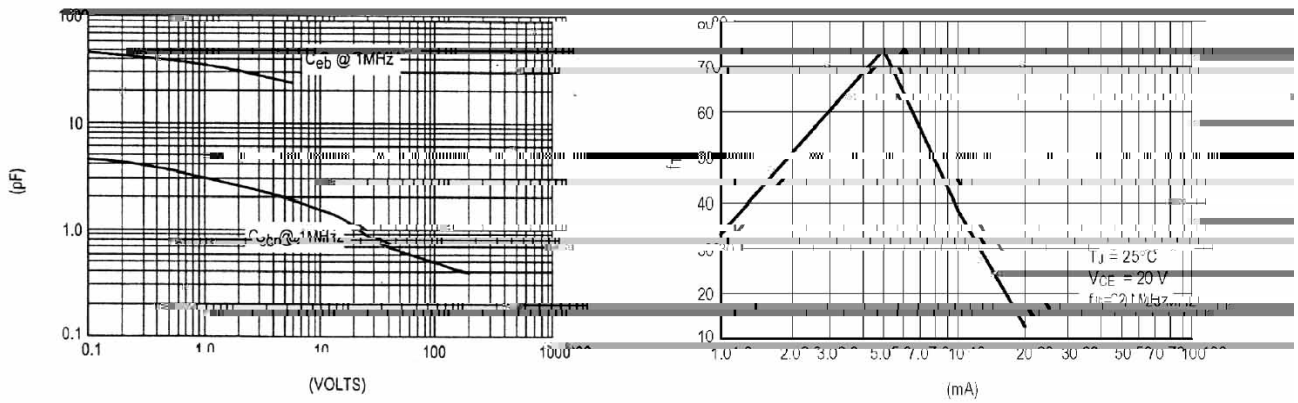
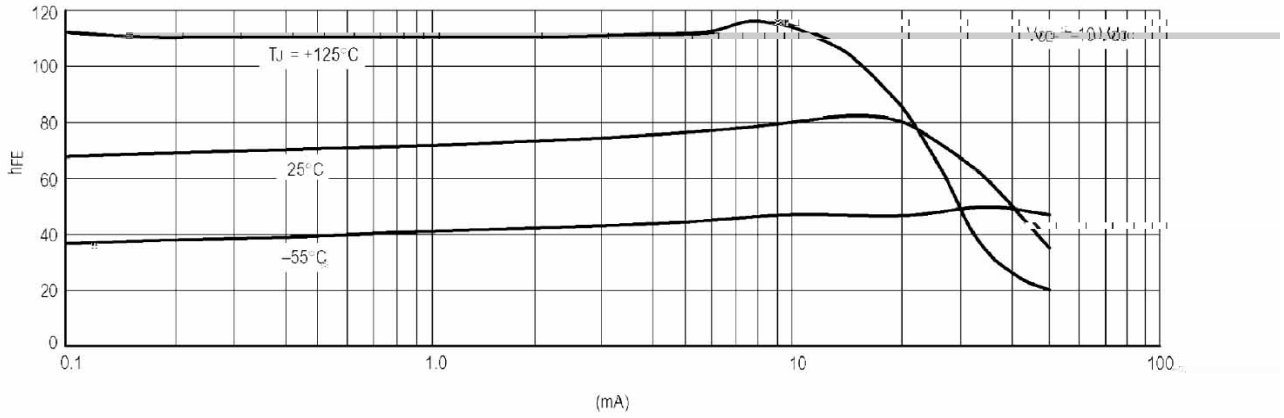
## / $h_{FE}$ Classifications & Marking

$h_{FE}$ Range	>50
Marking	H1V

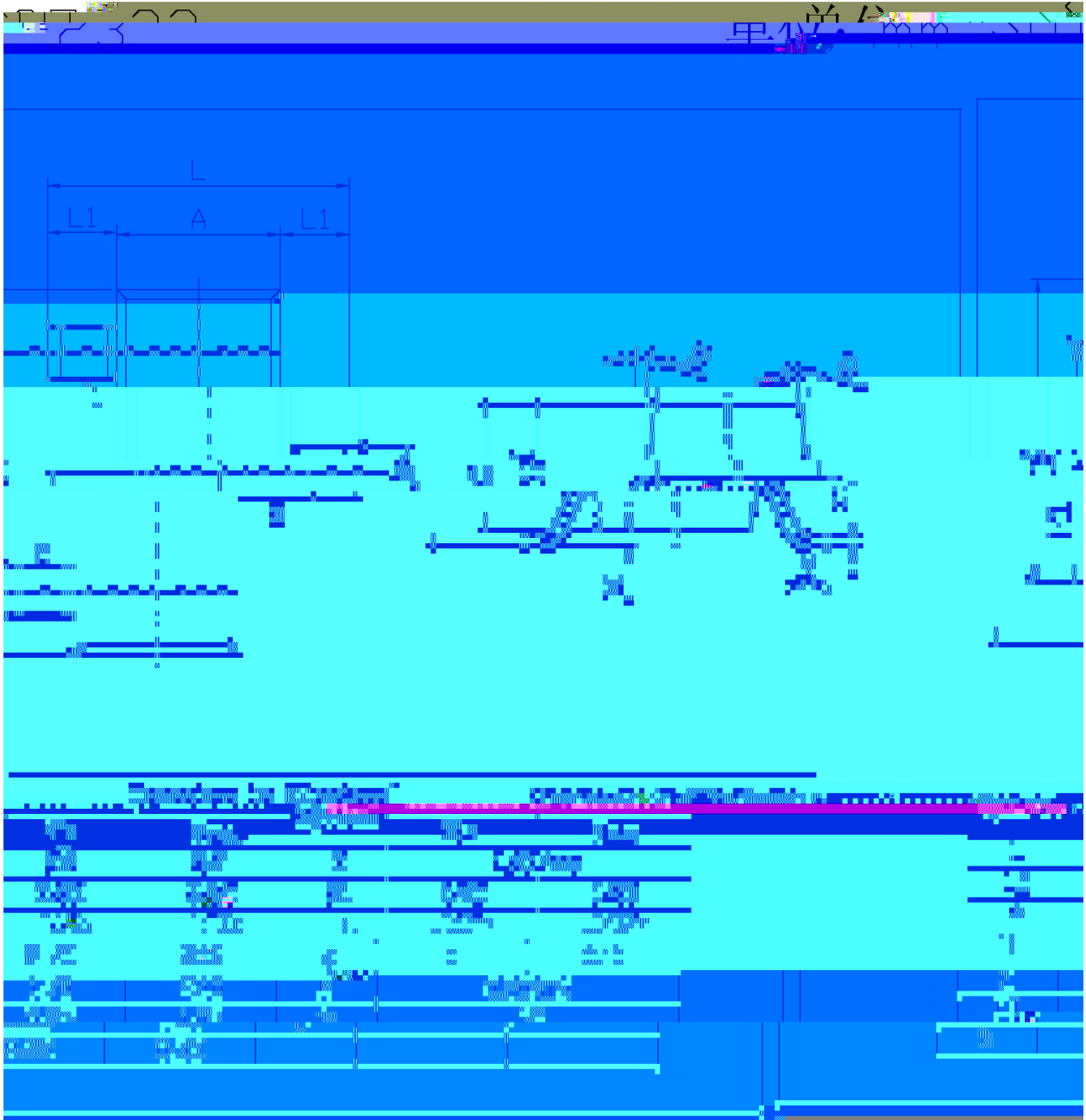
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	300	V
Collector to Emitter Voltage	$V_{CEO}$	300	V
Emitter to Base Voltage	$V_{EBO}$	5.0	V
Collector Current - Continuous	$I_C$	50	mA
Peak Collector Current - Continuous	$I_{CM}$	100	mA
Base Current	$I_B$	50	mA
Collector Power Dissipation	$P_C$	250	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	$V_{CBO}$	$I_C=100\mu A$ $I_E=0$	300			V
Collector to Emitter Breakdown Voltage	$V_{CEO}$	$I_C=1.0mA$ $I_B=0$	300			V
Emitter to Base Breakdown Voltage	$V_{EBO}$	$I_E=100\mu A$ $I_C$				

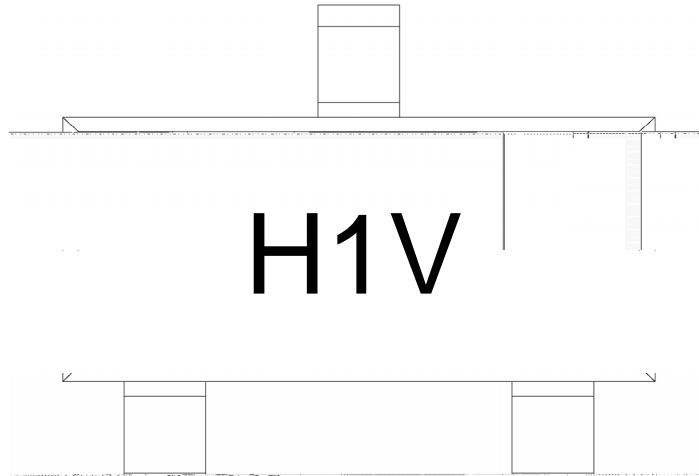
**/ Electrical Characteristic Curve**



/ Package Dimensions



**/ Marking Instructions**



H

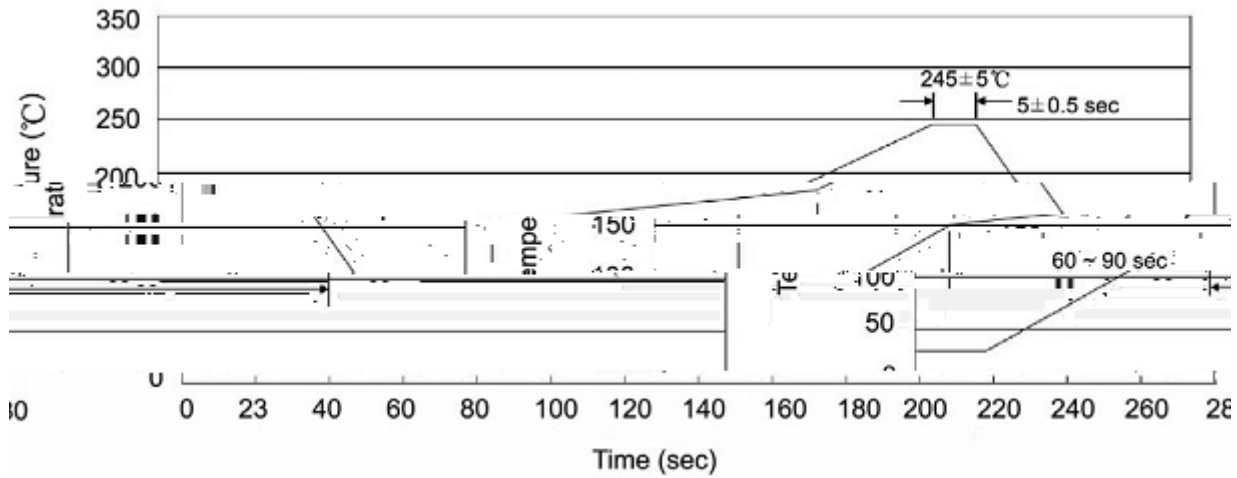
1V

Note:

H: Company Code.

1V: Product Type 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

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm <sup>3</sup> )		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOT-23	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205

/ Notices