

/ Descriptions

Silicon PNP transistor in a SOT-323 Plastic Package.

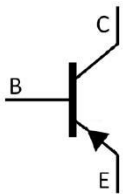
/ Features

High h_{FE} , complements the 2SD1819A.

/ Applications

General amplification.

/ Equivalent Circuit



/ Pinning



PIN1 Emitter PIN 2 Base PIN 3 Collector

/ Marking

h_{FE} Classifications Symbol	Q	R	S
h_{FE} Range	160 260	210 340	290 460
Marking	BHQ	BHR	BHS

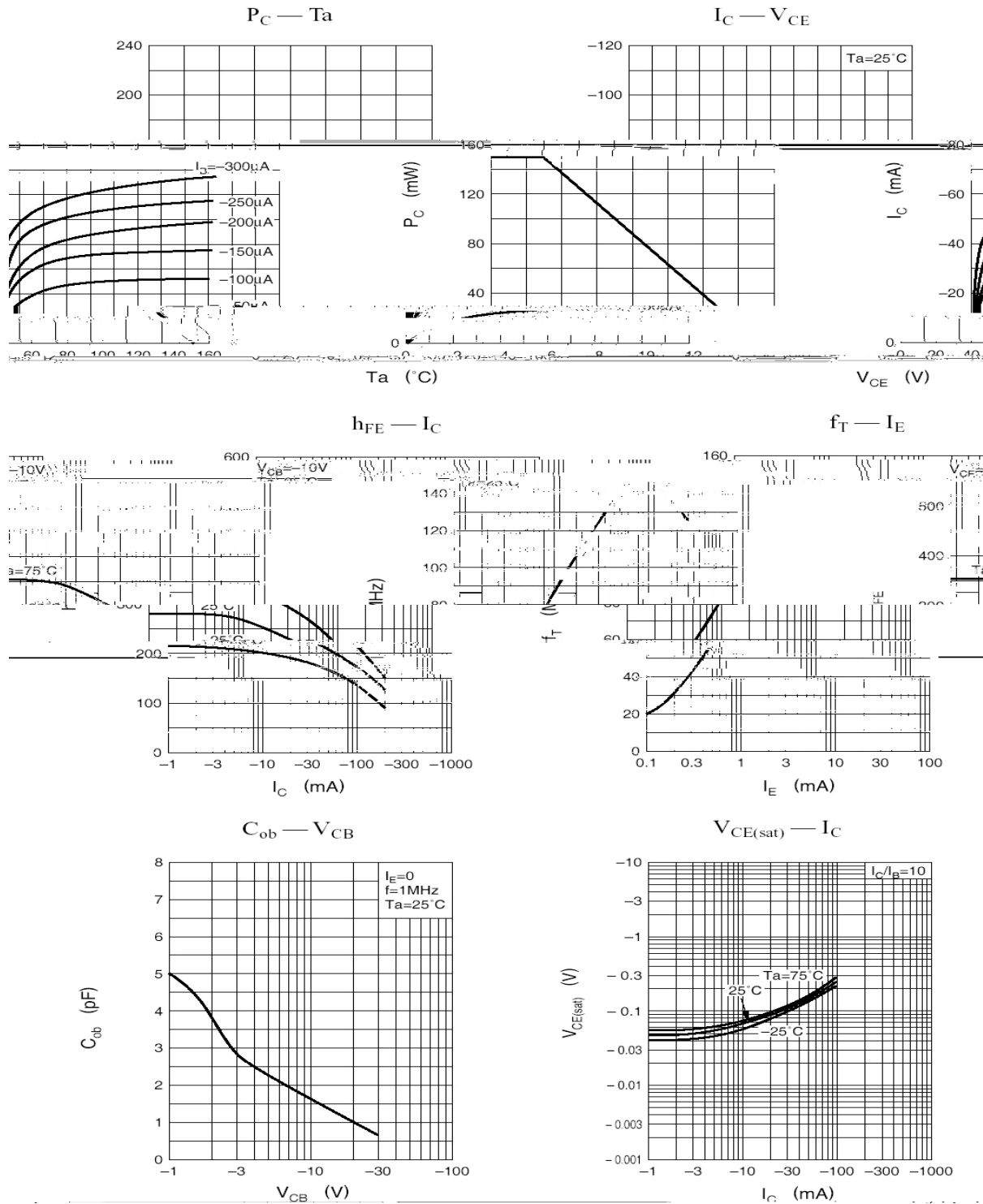
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-45	V
Collector to Emitter Voltage	V_{CEO}	-45	V
Emitter to Base Voltage	V_{EBO}	-7.0	V
Collector Current - Continuous	I_C	-100	mA
Collector Current – Continuous(Pulse)	I_{CP}	-200	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 150	°C

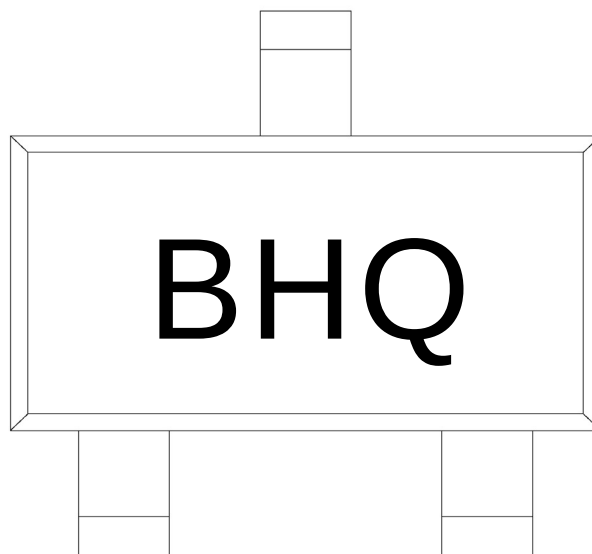
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C = -10\mu A$ $I_E = 0$	-45			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C = -2.0mA$ $I_B = 0$	-45			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E = -10\mu A$ $I_C = 0$	-7.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB} = -20V$ $I_E = 0$			-0.1	μA
Emitter Base Cut-Off Current	I_{EBO}	$V_{CE} = -10V$ $I_B = 0$			-100	μA
DC Current Gain	h_{FE}	$V_{CE} = -10V$ $I_C = -2.0mA$	160		460	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -100mA$ $I_B = -10mA$		-0.3	-0.5	V
Transition Frequency	f_T	$V_{Cb} = -10V$ $f = 200MHz$ $I_E = 1.0mA$		80		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10V$ $f = 1.0MHz$ $I_E = 0$		2.7		pF

/ Electrical Characteristic Curve



/ Marking Instructions



B

H

Q h_{FE}

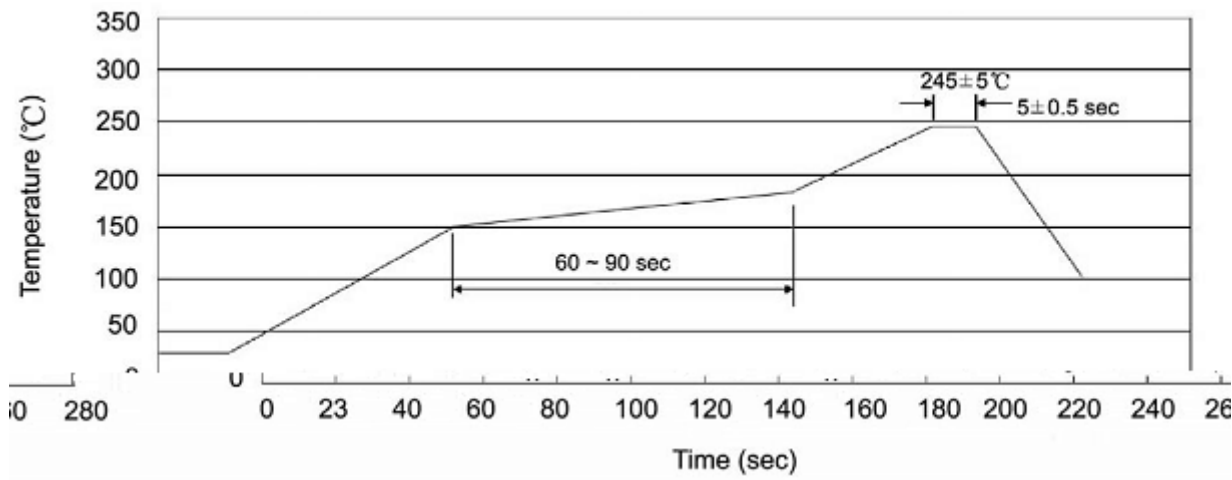
Note:

B: Product Type.

H: Company Code.

Q h_{FE} Classifications Symbol

() /



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 ³)		
	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-323	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205

/ Notices