

/ Descriptions

SOT23-6 PNP PNP Power Transistor in a SOT23-6 Plastic Package.

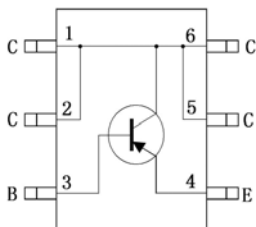
/ Features

Exceptional high gain, very low saturation voltage.

/ Applications

Power management in portable equipments, switching regulator in battery charger applications.

/ Equivalent Circuit



/ Pinning



/ Marking

h_{FE} Range	>100
Marking	H818B

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-30	V
Collector to Emitter Voltage	V_{CEO}	-30	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-3.0	A
Collector Peak Current	I_{CM}	-6	A
Base Current	I_B	-0.2	A
Base Peak Current	I_{BM}	-0.5	A
Total Dissipation	$P_{tot}(T_C=25)$	1.2	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-65 150	

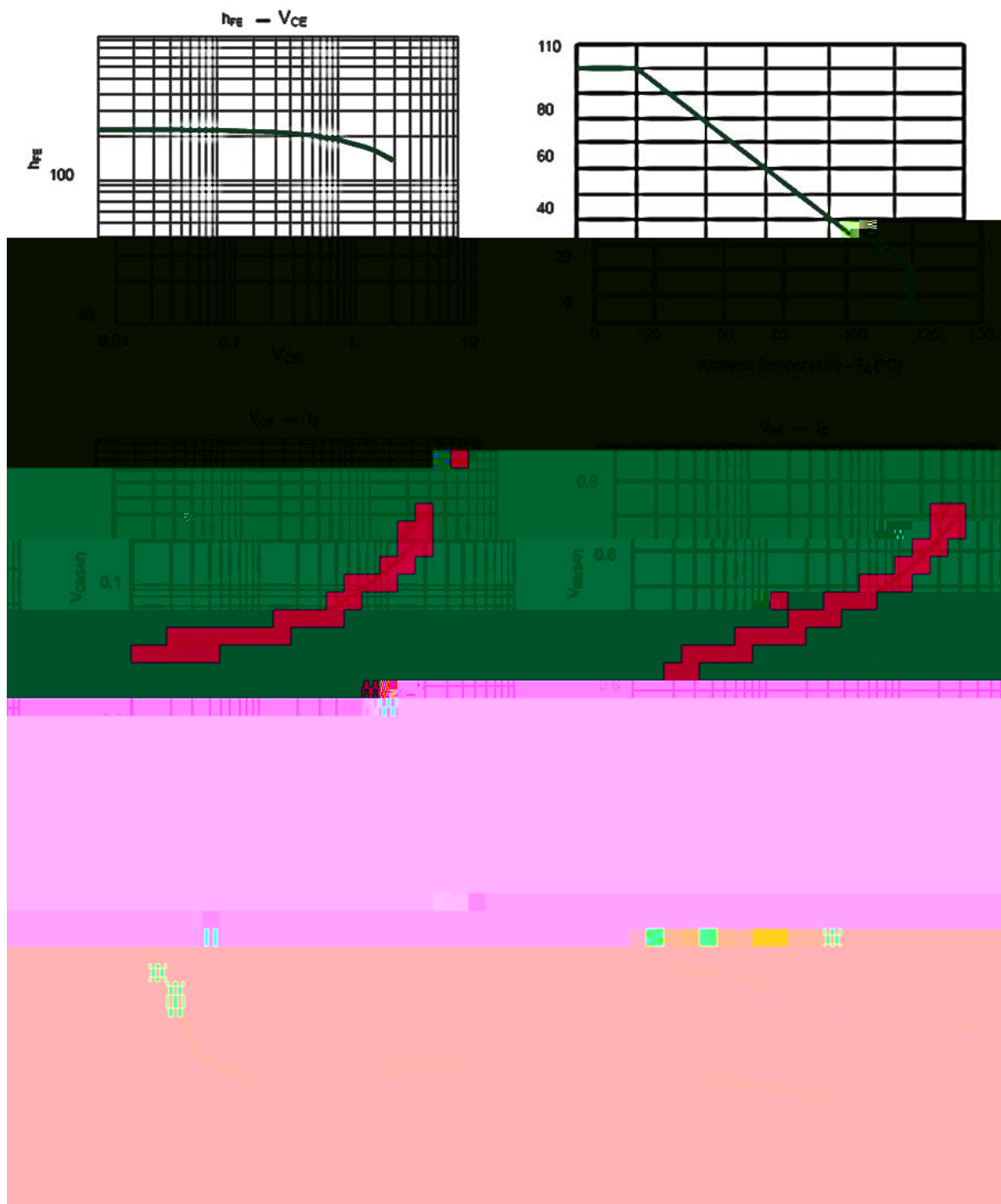
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-30V \quad I_E=0$			-0.1	A
		$V_{CB}=-30V \quad I_E=0$ $T_C=125$			-20	A
Emitter Base Cut-Off Current	I_{EBO}	$V_{EB}=-5.0V \quad I_C=0$			-0.1	A
DC Current Gain ₍₁₎	* $h_{FE(1)}$	$V_{CE}=-1.0V \quad I_C=-0.5A$	100	300		
DC Current Gain ₍₂₎	* $h_{FE(2)}$	$V_{CE}=-3.0V \quad I_C=-2.5A$	100			
Collector-Emitter Breakdown Voltage	* $V_{(BR)CEO}$	$I_D=-10mA \quad I_B=0$	-30			V
Collector to Emitter Saturation Voltage ₍₁₎	* $V_{CE(sat)(1)}$	$I_C=-0.5A \quad I_B=-5.0mA$		-0.075	-0.15	V
Collector to Emitter Saturation Voltage ₍₂₎	* $V_{CE(sat)(2)}$	$I_C=-2.0A \quad I_B=-20mA$		-0.21	-0.5	V
Base to Emitter Saturation Voltage	* $V_{BE(sat)}$	$I_C=-0.5A \quad I_B=-5.0mA$		-0.74	-1.1	V
Base-Emitter Voltage	* $V_{BE(ON)}$	$I_C=-0.5A \quad V_{CE}=-2.0V$		-0.71	-1.1	V

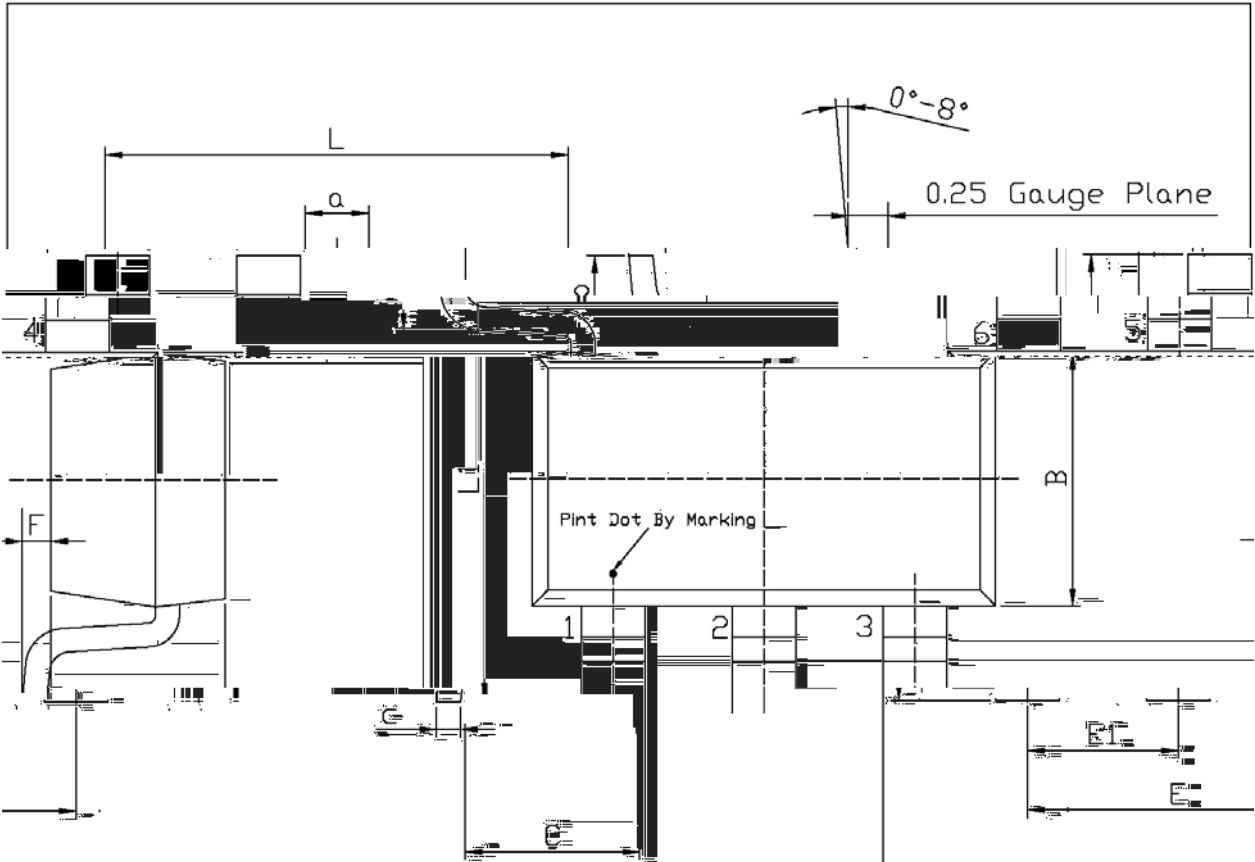
* $\tau = 300\mu s \quad \leq 1.5$

*Pulse Test: Pulse duration = 300 s, Duty Cycle 1.5%.

/ Electrical Characteristic Curve



/ Package Dimensions

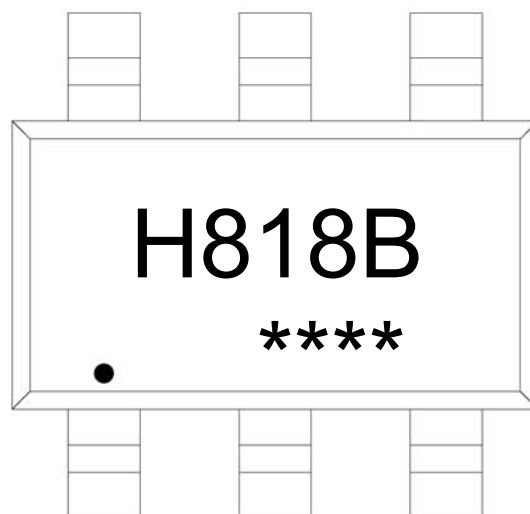


Unit: mm

Dimensions In Millimeters		Symbol		Dimensions In Millimeters		Symbol		Dimensions In Millimeters	
Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
3.00	0.85	1.05	0.35	0.50	0.35	0.50	0.35	0.50	0.35
B	1.50	1.70	a	0.35	0.50	B	1.50	1.70	a
F	0.90	1.20	E	0.10	0.20	F	0.90	1.20	E
G	2.60	3.00	h	0.35	0.55	G	2.60	3.00	h
0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15

SOT23-3

/ Marking Instructions



H

818B

****:

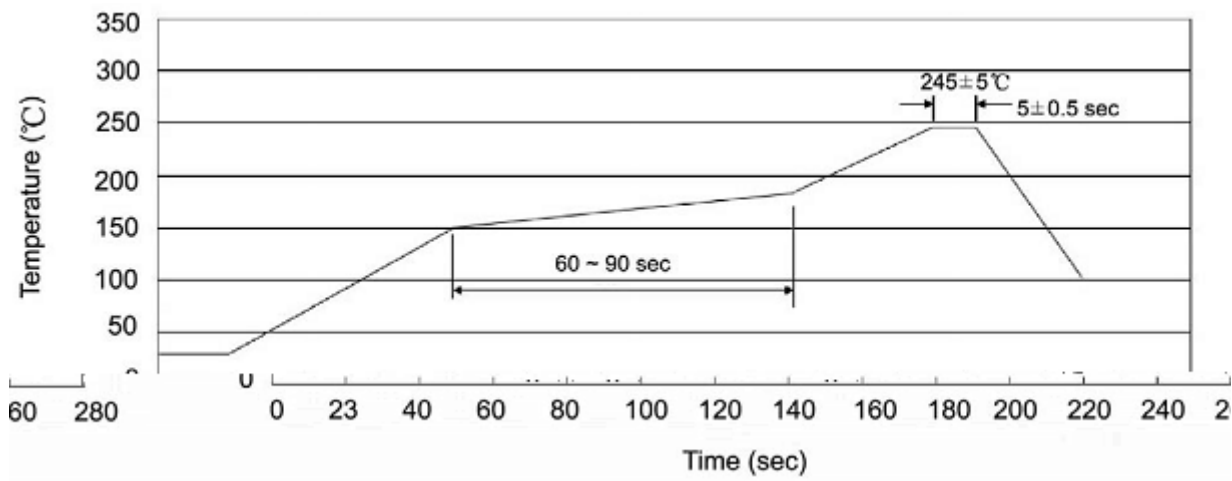
Note:

H: Company Code.

818B: Product Type Code

****: Lot No. Code, code change with Lot No.

() / 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 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
SOT23-5/6	3,000	10	30,000	4	120,000	7 ×8	210×205×205	445×230×435

/ Notices