

/ Descriptions

PNP Power Transistor in a SOT23-6 Plastic Package.

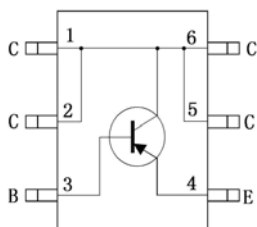
/ Features

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)

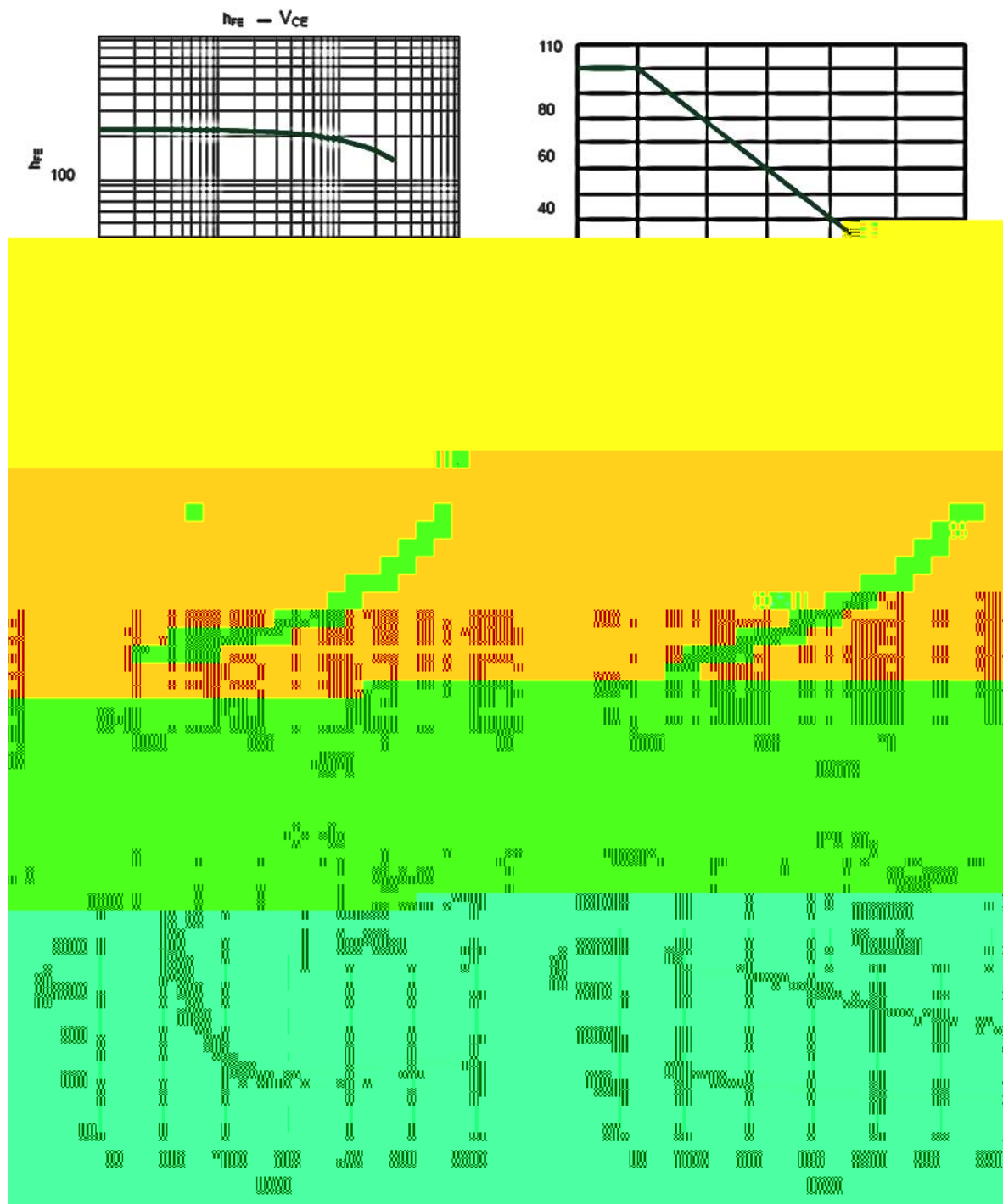
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-30	V
Collector to Emitter Voltage	V_{CEO}	-30	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-3.0	A
Collector Peak Current	I_{CM}	-6	A
Base Current	I_B	-0.2	A
Base Peak Current	I_{BM}	-0.5	A
Total Dissipation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

/ Electrical Characteristics(Ta=25)

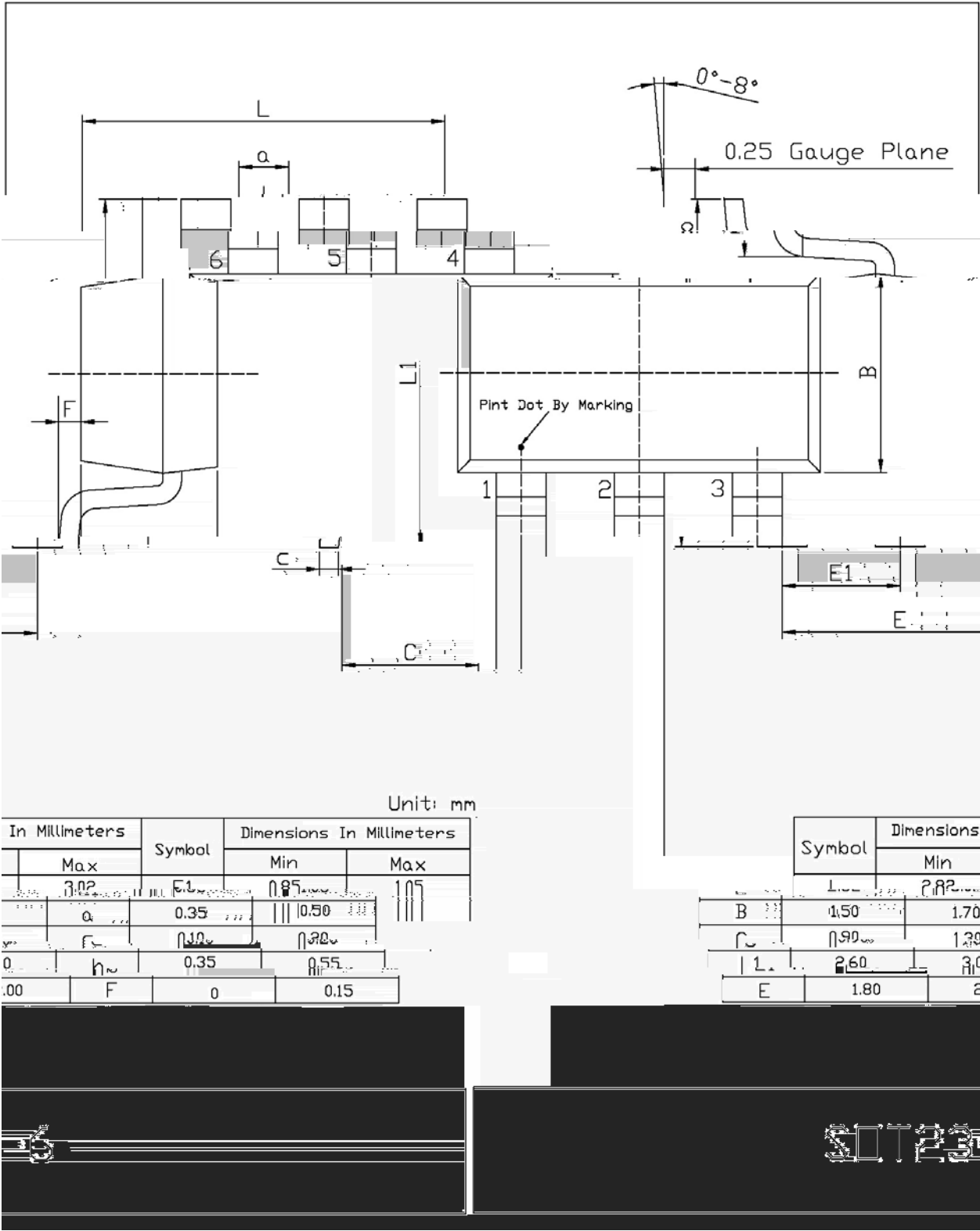
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-30V \quad I_E=0$			-0.1	μA
		$V_{CB}=-30V \quad I_E=0$ $T_C=125$			-20	μA
Emitter Base Cut-Off Current	I_{EBO}	$V_{EB}=-5.0V \quad I_C=0$			-0.1	μA
DC Current Gain ₍₁₎	$*h_{FE(1)}$	$V_{CE}=-1.0V \quad I_C=-0.5A$	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

*Pulse Test: Pulse duration = 300 μs , Duty Cycle $\leq 1.5\%$.

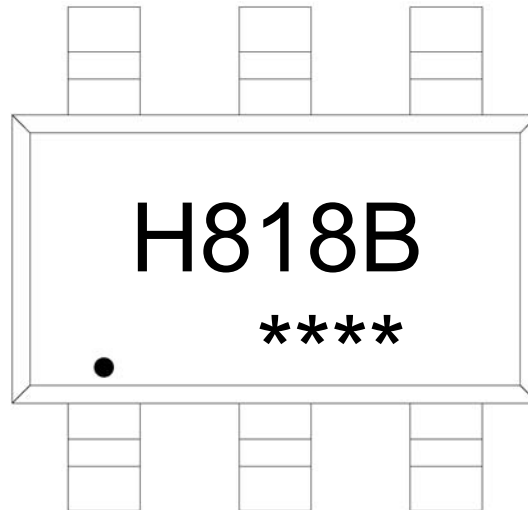
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



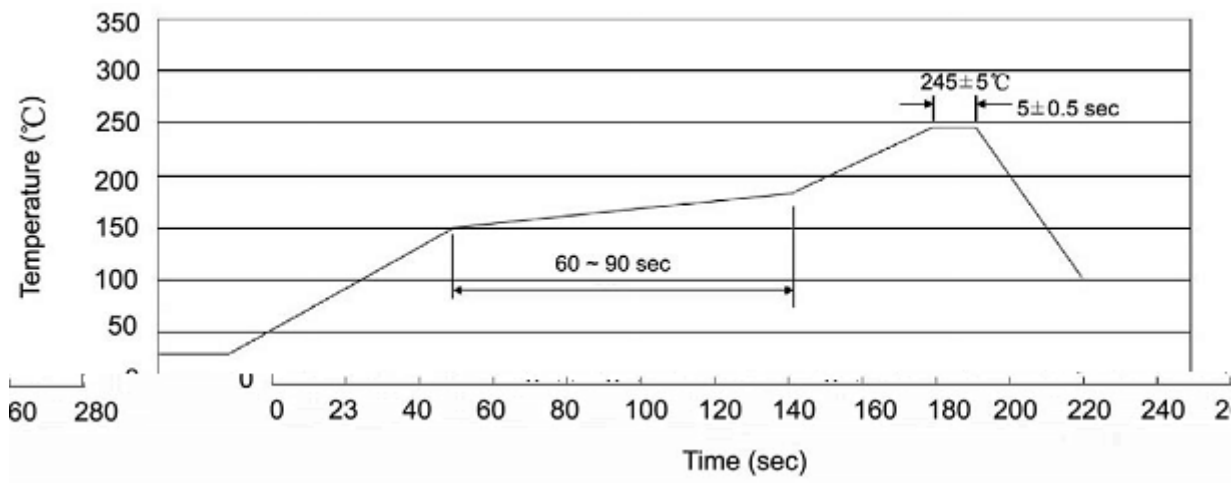
Note:

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;
- 2

245 5

5 0.5sec;
- 3

2 10 /sec.
- 1.Preheating:25~150 , Time:60~90sec.

2.Peak Temp.:245 5 , Duration:5 0.5sec.

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