

**/ Descriptions**

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

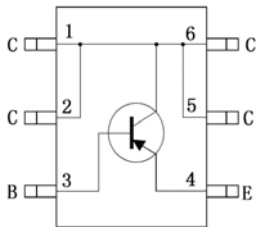
**/ Features**

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 )**

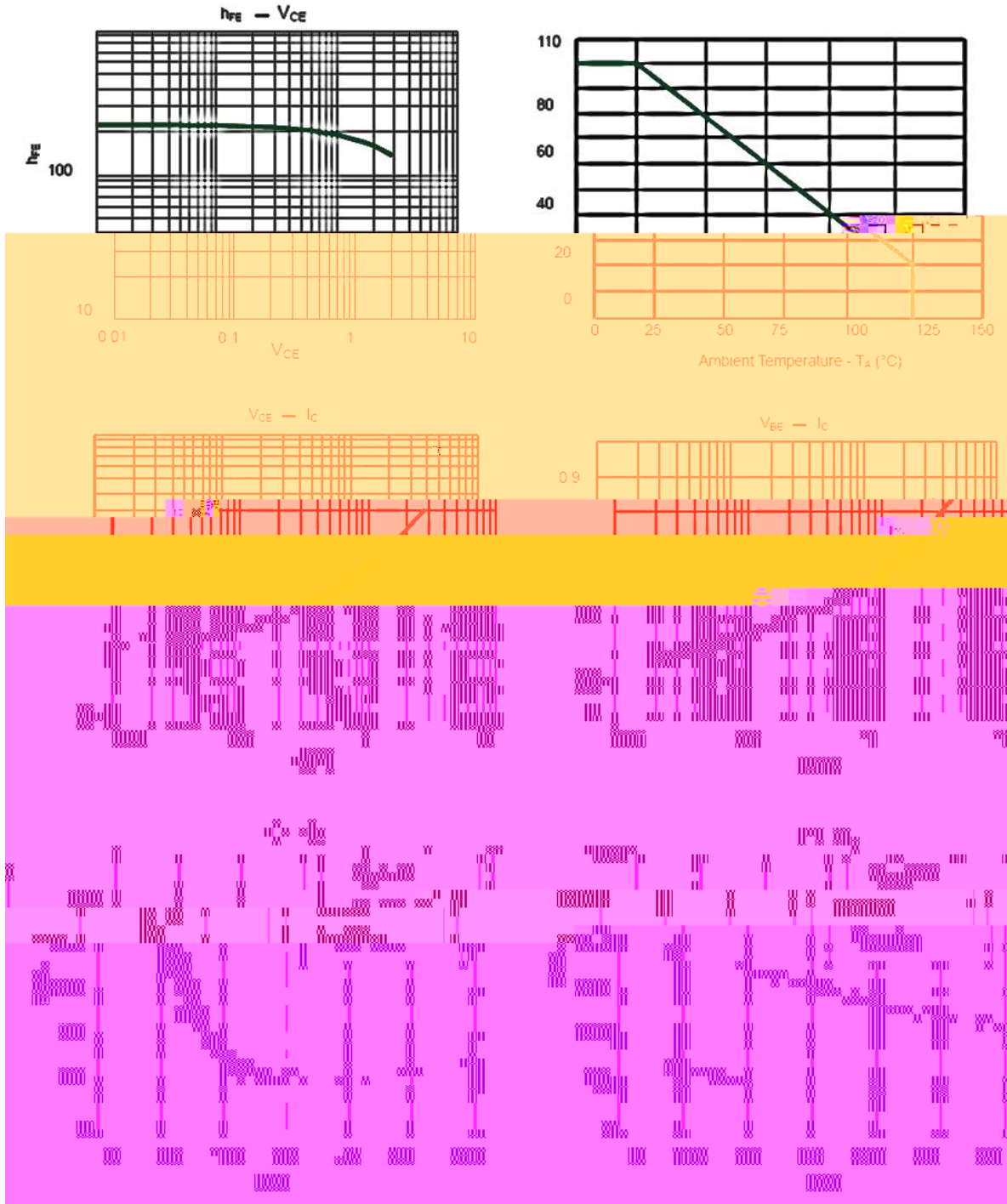
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	-30	V
Collector to Emitter Voltage	$V_{CEO}$	-30	V
Emitter to Base Voltage	$V_{EBO}$	-5.0	V
Collector Current - Continuous	$I_C$	-3.0	A
Collector Peak Current	$I_{CM}$	-6	A
Base Current	$I_B$	-0.2	A
Base Peak Current	$I_{BM}$	-0.5	A
Total 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 )**

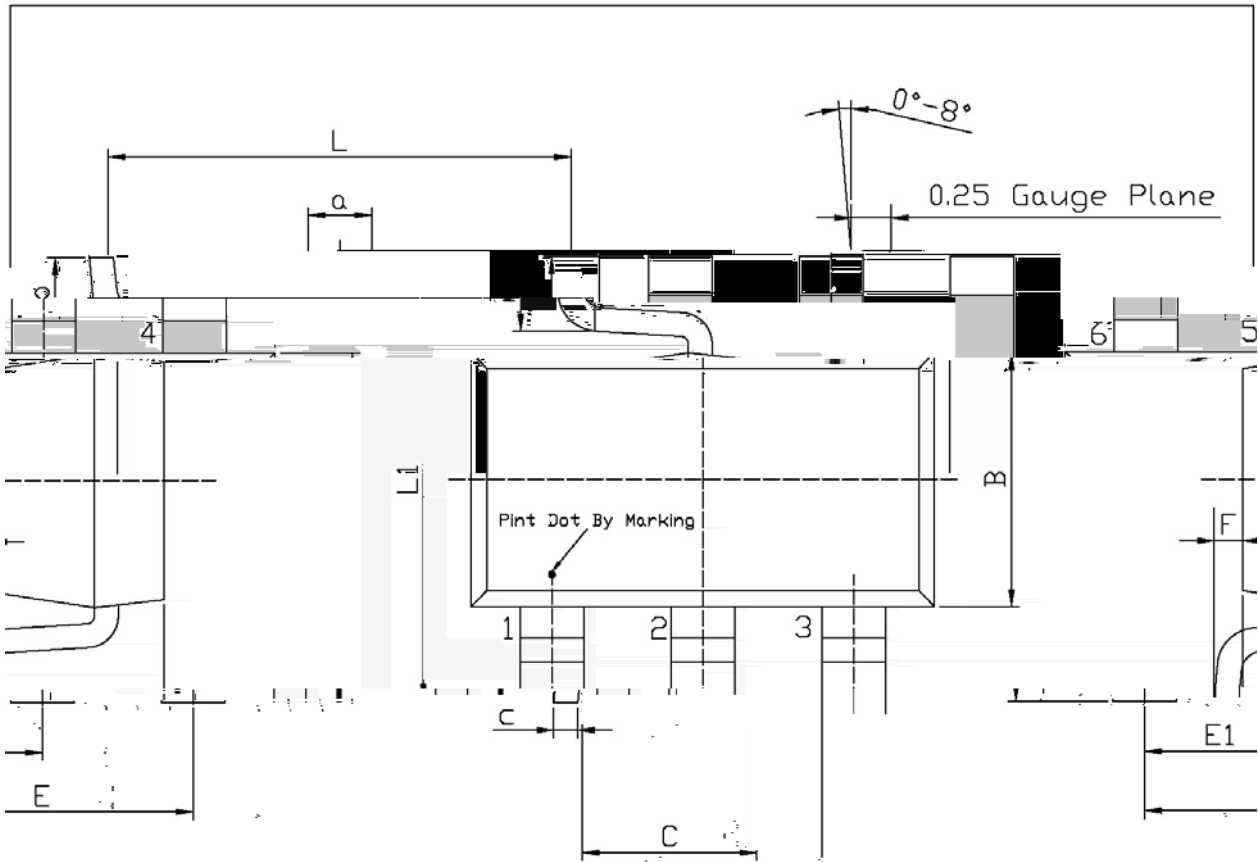
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	$I_{CBO}$	$V_{CB}=-30V \quad I_E=0$			-0.1	A
		$V_{CB}=-30V \quad I_E=0$ $T_C=125$			-20	A
Emitter Base Cut-Off Current	$I_{EBO}$	$V_{EB}=-5.0V \quad I_C=0$			-0.1	A
DC Current Gain <sub>(1)</sub>	* $h_{FE(1)}$	$V_{CE}=-1.0V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

\*  $t_r = 300\mu s$   $f = 1.5$   
\*Pulse Test: Pulse duration = 300 s, Duty Cycle 1.5%.

/ Electrical Characteristic Curve

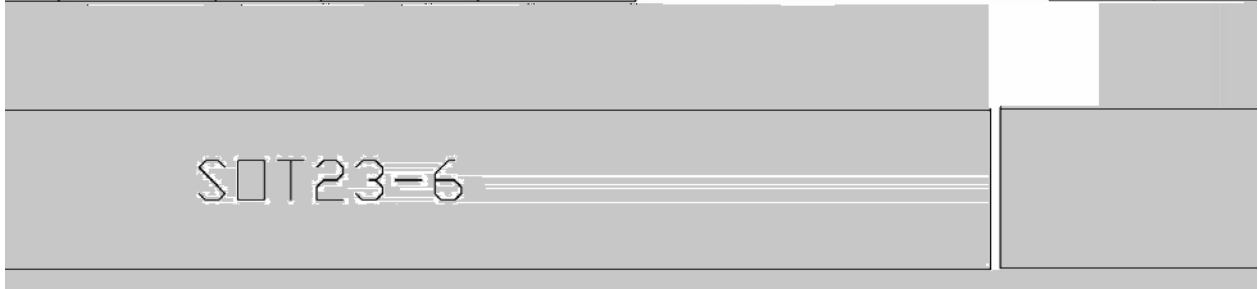


/ Package Dimensions

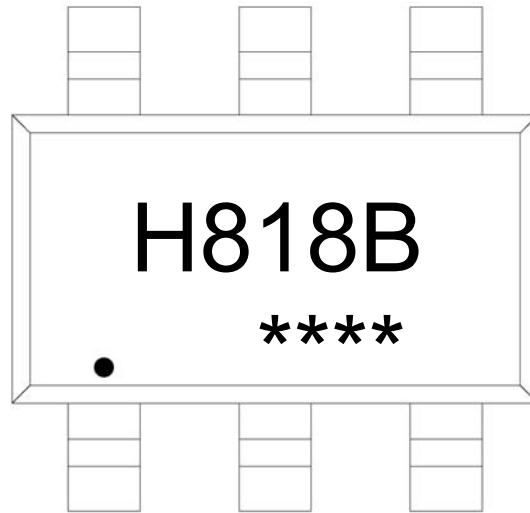


Unit: mm

Dimensions In Millimeters		Symbol	Dimensions In Millimeters		Symbol
Min	Max		Min	Max	
2.80	3.00	E1	0.85	1.05	
50	1.70	a	0.35	0.50	B
3.00	1.30	F	0.35	0.55	E
2.00		F	0	0.15	E



/ Marking Instructions



H

818B

\*\*\*\*:

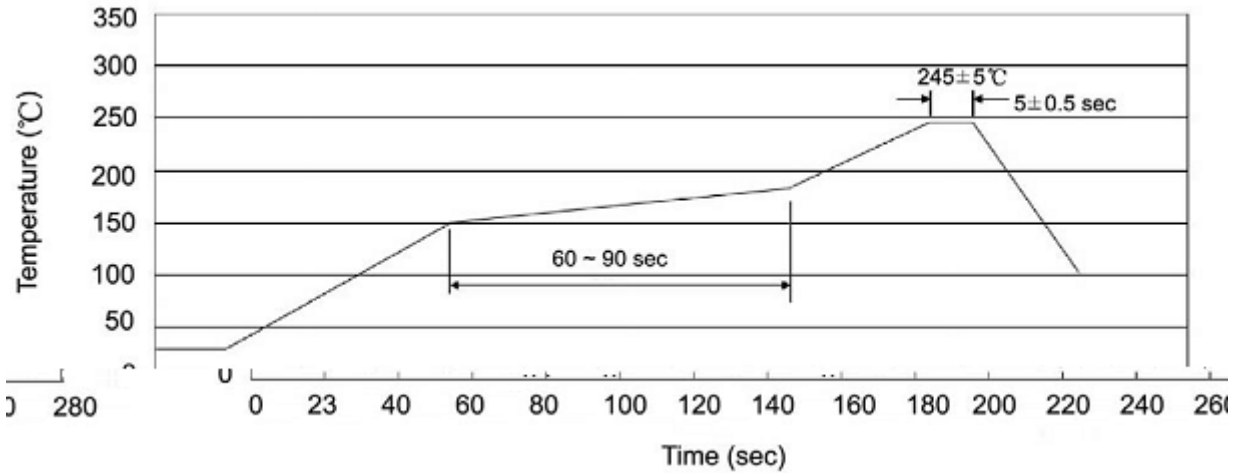
Note:

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

/ Notices