BRT818B

Rev.E Feb.-2018

DATA SHEET

/ Descriptions

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

/ Features

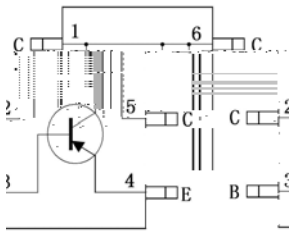
,

Exceptional high gain, very low saturation voltage.

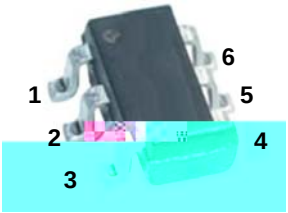
/ Applications

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

/ Equivalent Circuit



/ Pinning



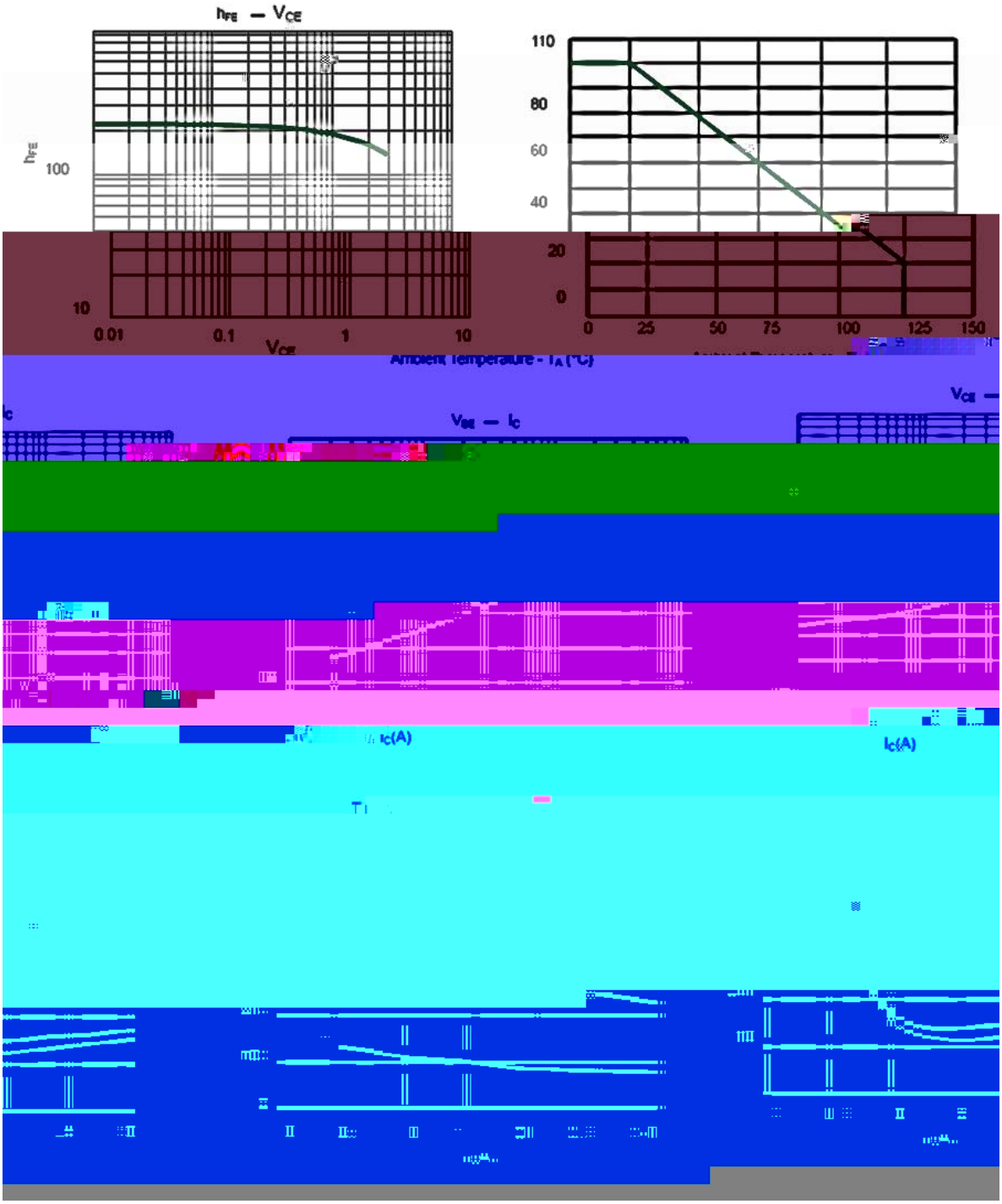
/ Marking

h_{FE} Range	>100
Marking	H818B

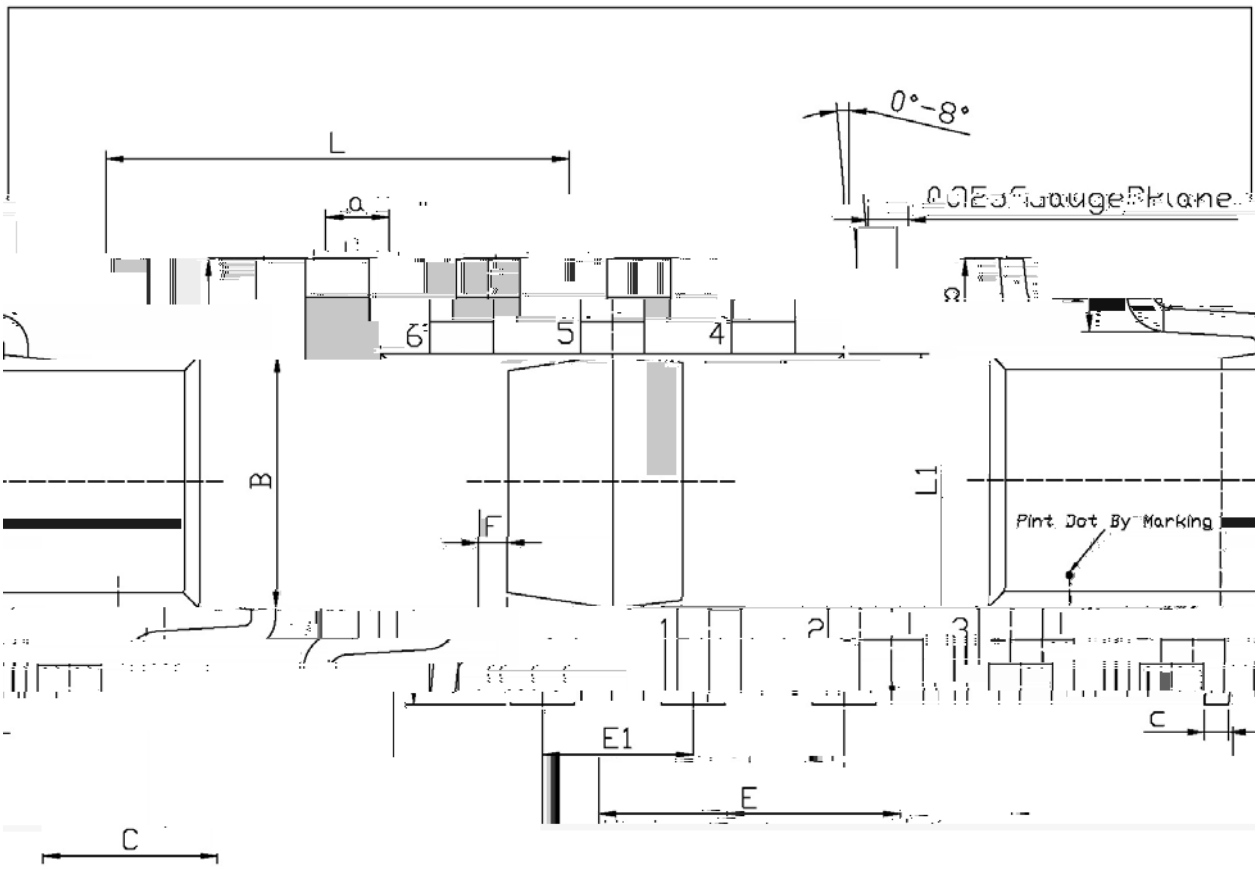
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-30	V
Collector to Emitter Voltage	V_{CEO}	-30	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-3.0	A
Collector Peak Current	I_{CM}	-6	A
Base Current	I_B	-0.2	A
Base Peak Current	I_{BM}	-0.5	A
Total Dissipation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

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

/ Electrical Characteristic Curve



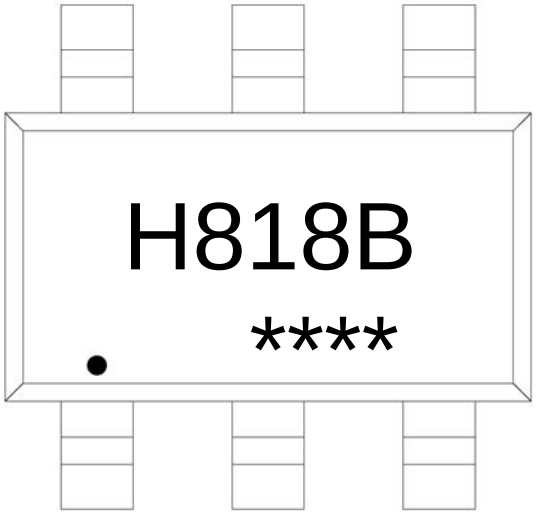
/ Package Dimensions



Unit: mm

Symbol	Min	Max	Symbol	Min	Max
	2.82	3.02	E1	0.85	1.05
	1.70			0.35	0.50
	3.00				
	1.80	2.00	F	0	0.15

/ Marking Instructions



H

818B

****:

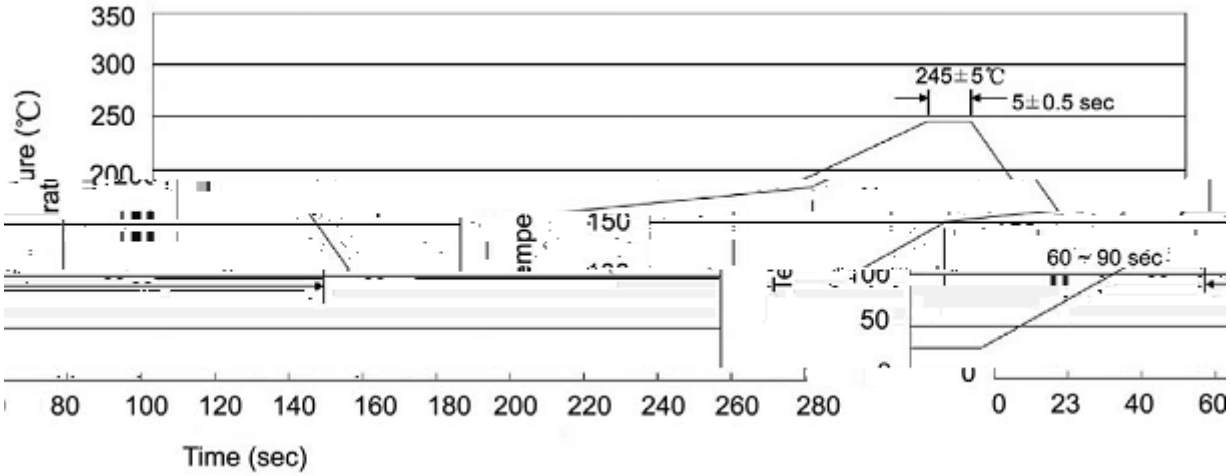
Note:

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	Units					Dimension		(unit mm³)
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box
SOT23-5/6	3,000	10	30,000	4	120,000	7 ×8	210×205×205	445×230×435

/ Notices