

■ PNP Transistors

■ Features

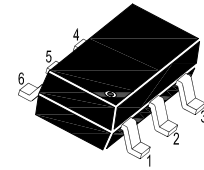
- Collector Current Capability $I_C = -3A$
- Collector Emitter Voltage $V_{CE0} = -30V$
- Very low collector to emitter saturation voltage

■ Applications

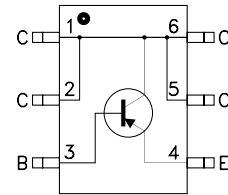
- Power management in portable equipments
- Switching regulator in battery charge applications

■ Descriptions

The device is manufactured in low voltage PNP Planar Technology with "Base Island" layout. The resulting Transistor shows exceptional high gain performance coupled with very low saturation voltage.



■ Simplified outline(SOT23-6)



■ Marking

Marking	818B
---------	------

■ Absolute Maximum Ratings $T_a = 25^\circ C$

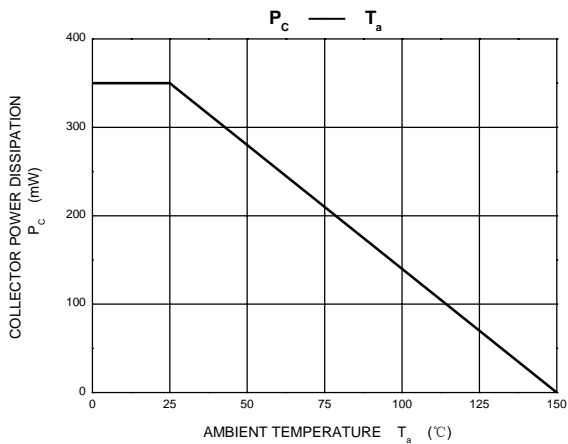
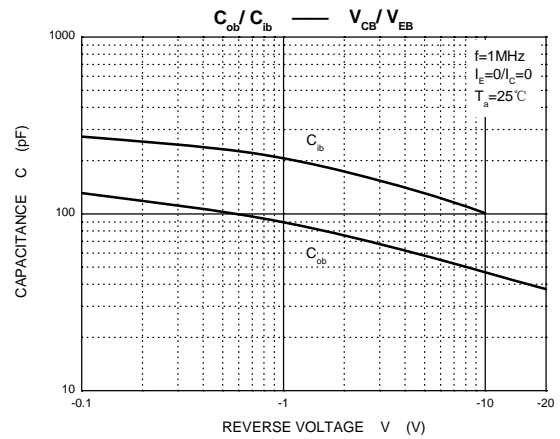
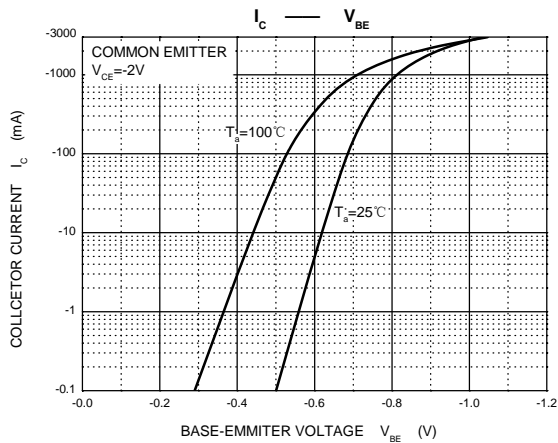
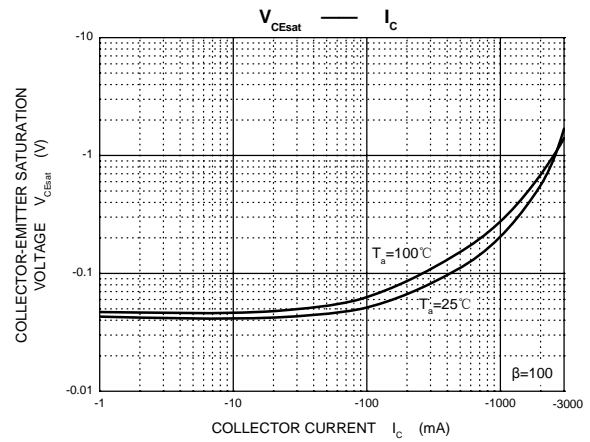
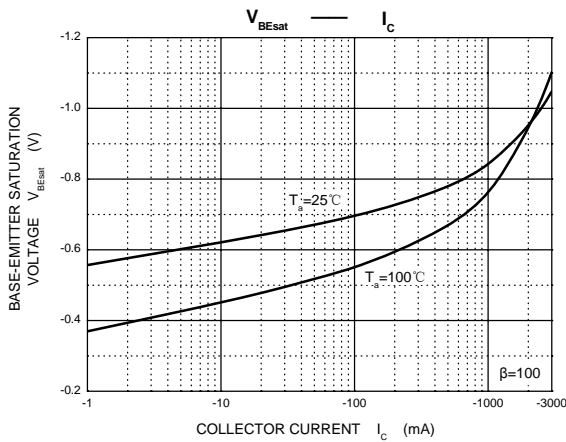
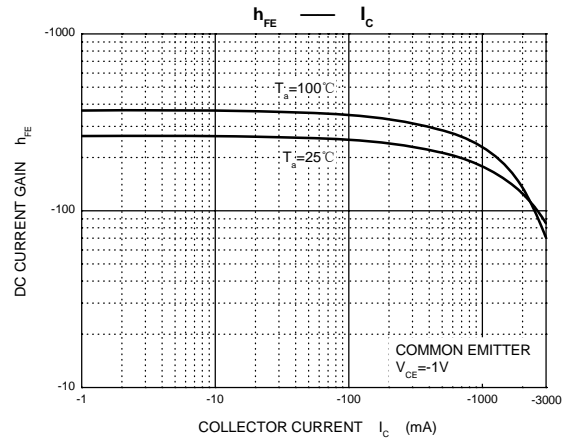
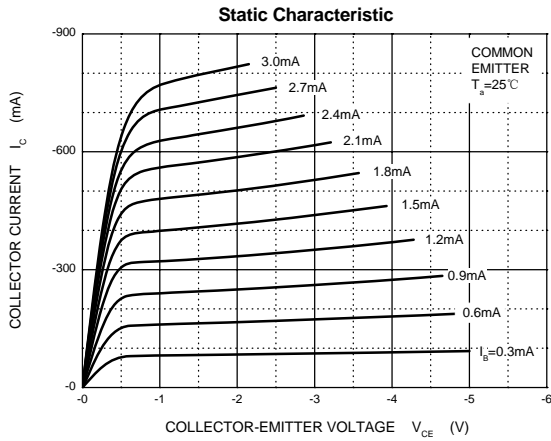
Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-30	V
V_{CEO}	Collector-Emitter Voltage	-30	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-3	A
P_C	Collector Dissipation	0.35	W
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	357	$^\circ C/W$
P_{tot}	Total Dissipation at $T_C = 25^\circ C$	1.2	W
$R_{\theta JC}$	Thermal Resistance from Junction to case (note 1)	104.2	$^\circ C/W$
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	$^\circ C$

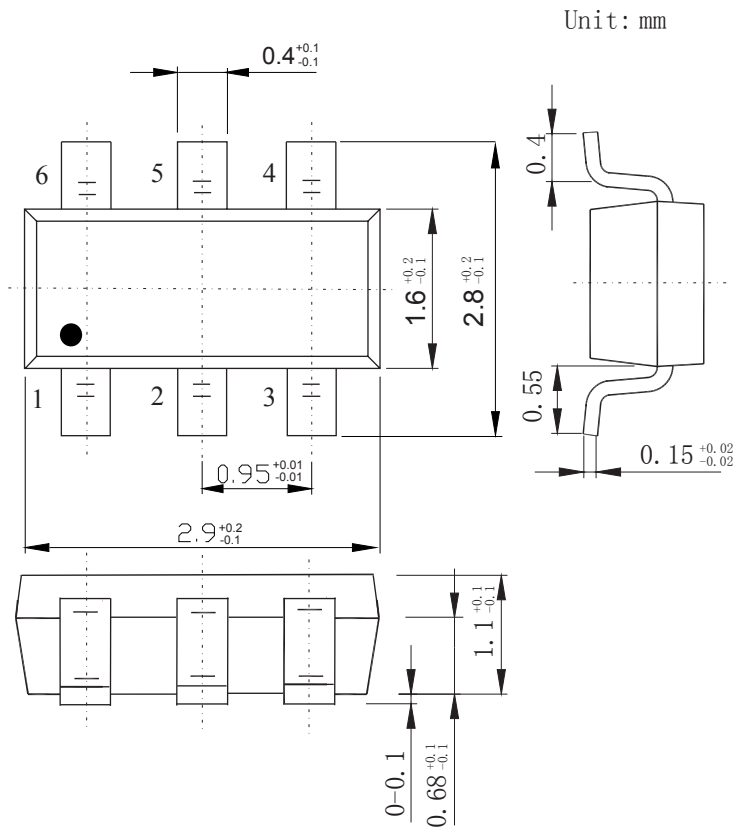
Note 1: Package mounted on FR4 pcb 25mm x 25mm.

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu A, I_E=0$	-30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}^*$	$I_C=-10mA, I_B=0$	-30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu A, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-30V, I_E=0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5V, I_C=0$			-0.1	μA
DC current gain	h_{FE}^*	$V_{CE}=-1V, I_C=-0.5A$	100			
		$V_{CE}=-3V, I_C=-2.5A$	100			
Collector-emitter saturation voltage	$V_{CE(sat)}^*$	$I_C=-0.5A, I_B=-5mA$			-0.15	V
		$I_C=-1.2A, I_B=-12mA$			-0.45	V
		$I_C=-2A, I_B=-20mA$			-0.8	V
Base-emitter saturation voltage	$V_{BE(sat)}^*$	$I_C=-0.5A, I_B=-5mA$			-1.1	V
		$I_C=-1.2A, I_B=-12mA$			-1.1	V
		$I_C=-2A, I_B=-20mA$			-1.2	V
Base-emitter on voltage	$V_{BE(on)}^*$	$I_C=-0.5A, V_{CE}=-2V$			-1.1	V

*Pulse test: Pulse width \leq 300us,duty cycle \leq 2.0%.





Summary of Packing Options

Package	Package Description	Packing Quantity	Industry Standard
SOT23-6	Tape/Reel, 7" reel	3000	EIA-481-1