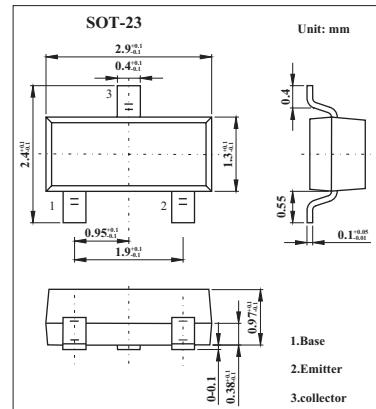


## PNP Epitaxial Planar Silicon Transistors

### 2SB815

#### ■ Features

- Ultrasmall package allows miniaturization in end products.
- Large current capacity ( $I_c=0.7A$ ) and low-saturation voltage.



#### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CBO}$	-20	V
Collector-emitter voltage	$V_{CEO}$	-15	V
Emitter-base voltage	$V_{EBO}$	-5	V
Collector current	$I_c$	-0.7	A
Collector current (pulse)	$I_{CP}$	-1.5	A
Collector dissipation	$P_c$	200	mW
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +125	$^\circ\text{C}$

#### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	$I_{CBO}$	$V_{CB} = -15V$ , $I_E = 0$			-0.1	$\mu\text{A}$
Emitter cutoff current	$I_{EBO}$	$V_{EB} = -4V$ , $I_C = 0$			-0.1	$\mu\text{A}$
DC current Gain	$h_{FE}$	$V_{CE} = -2V$ , $I_C = -50\text{mA}$	200		600	
Gain bandwidth product	$f_T$	$V_{CE} = -10V$ , $I_C = -50\text{mA}$		250		MHz
Output capacitance	$C_{ob}$	$V_{CB} = -10V$ , $f = 1\text{MHz}$		13		pF
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -5\text{mA}$ , $I_B = -0.5\text{mA}$			-15	-35 mV
	$V_{CE(sat)}$	$I_C = -100\text{mA}$ , $I_B = -10\text{mA}$			-60	-120 mV

#### ■ hFE Classification

Marking	B6	B7
hFE	200~400	300~600