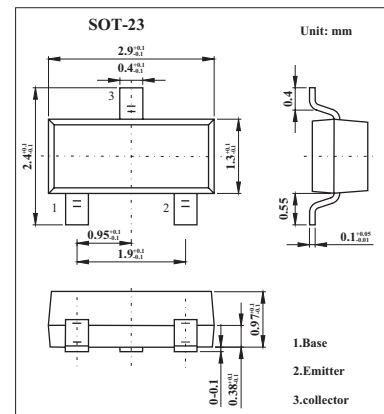


## PNP Epitaxial Planar Silicon Transistors

## 2SB1527

## ■ Features

- Low saturation voltage.
- Contains a diode between collector and emitter.
- Contains a bias resistor between base and emitter.
- Large current capacity.
- Compact package making it easy to realize highdensity, small-sized hybrid ICs.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	-20	V
Collector-emitter voltage	$V_{CEO}$	-15	V
Emitter-base voltage	$V_{EBO}$	-5	V
Collector current	$I_C$	-0.8	A
Collector current (pulse)	$I_{CP}$	-2	A
Collector dissipation	$P_C$	200	mW
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cutoff current	$I_{CBO}$	$V_{CB} = -15\text{V}, I_E = 0$			-1	$\mu\text{A}$
DC current Gain	$h_{FE}$	$V_{CE} = -2\text{V}, I_C = -0.5\text{A}$	70			
Gain bandwidth product	$f_T$	$V_{CE} = -2\text{V}, I_C = -0.5\text{A}$		250		MHz
Output capacitance	$C_{ob}$	$V_{CB} = -10\text{V}, f = 1\text{MHz}$		30		pF
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}, I_B = -10\text{mA}$		-0.2	-0.4	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500\text{mA}, I_B = -10\text{mA}$		-0.095	-1.3	V
Collector-to-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -10\mu\text{A}, I_E = 0$	-20			V
Collector-to-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}, R_{BE} = \infty$	-15			V
Diode forward voltage	$V_F$	$I_F = -0.5\text{A}$			-1.5	V
Base-emitter resistance	$R_{BE}$			1		K $\Omega$

## ■ Marking

Marking	NS