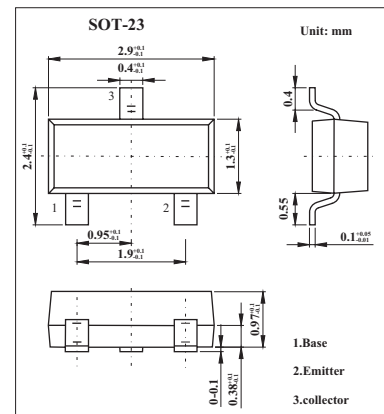


PNP Epitaxial Planar Silicon Transistors

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_{CE0}	-15	V
Emitter-base voltage	V_{EB0}	-5	V
Collector current	I_C	-0.8	A
Collector current (pulse)	I_{CP}	-2	A
Collector dissipation	P_C	200	mW
Jumction 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	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = -15\text{V}$, $I_E = 0$			-1	μA
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	$V_{BE(sat)}$	$I_C = -500\text{mA}$, $I_B = -10\text{mA}$		-.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 Ω

■ Marking

Marking	NS
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