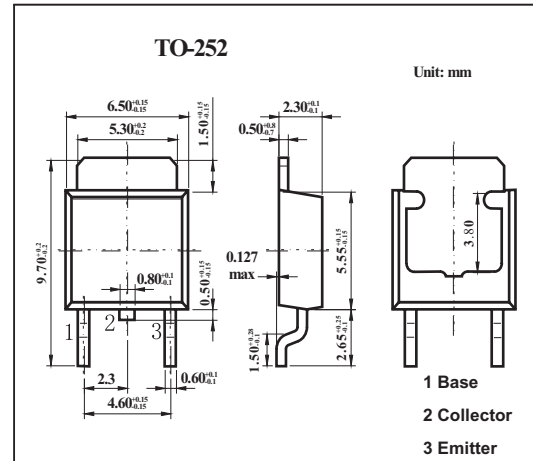


PNP Silicon Epitaxial Transistor

2SB1261-Z

■ Features

- Low $V_{CE(sat)}$: $V_{CE(sat)} \leq -0.3V$.
- High h_{FE} .

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

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	-60	V
Collector to emitter voltage	V_{CEO}	-60	V
Emitter to base voltage	V_{EBO}	-7	V
Collector current	I_C	-3	A
Collector current pulse *1	I_{CP}	-5	A
Base current	I_B	-0.5	A
Total power dissipation	P_T	2 *2	W
		10	W
Junction temperature	T_j	150	$^\circ C$
Storage temperature range	T_{stg}	-55 to +150	$^\circ C$

*1 $PW \leq 10ms$, duty cycle $\leq 50\%$.

*2 When mounted on ceramic substrate of $7.5cm^2 \times 0.7mm$

2SB1261-Z■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = -60\text{ V}, I_E = 0$			-10	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = -7.0\text{ V}, I_C = 0$			-10	μA
DC current gain *	h_{FE}	$V_{CE} = -2.0\text{ V}, I_C = -0.6\text{A}$	100		400	
		$V_{CE} = -2.0\text{ V}, I_C = -2\text{A}$	50			
Collector saturation voltage *	$V_{CE(sat)}$	$I_C = -1.5\text{A}, I_B = -0.15\text{A}$		-0.2	-0.3	V
Base saturation voltage *	$V_{BE(sat)}$	$I_C = -1.5\text{A}, I_B = -0.15\text{A}$		-0.94	-1.2	V
Gain bandwidth product	f_T	$V_{CE} = -5.0\text{ V}, I_E = 1.5\text{A}$		50		MHz
Output capacitance	C_{ob}	$V_{CB} = -10\text{ V}, I_E = 0, f = 1.0\text{ MHz}$		40		pF
Turn-on time	t_{on}	$I_C = -1.0\text{ A}, I_{B1} = -I_{B2} = -0.1\text{ A}, V_{CC} = -10\text{ V}, R_L = 10\Omega$		0.15	0.5	μs
Storage time	t_{stg}			0.5	2.0	μs
Fall time	t_f			0.1	0.5	μs

* Pulsed: $PW \leq 350\ \mu\text{s}$, duty cycle $\leq 2\%$ ■ h_{FE} Classification

Rank	M	L	K
h_{FE}	100~200	160~320	200~400