XN4404

Silicon PNP epitaxial planer transistor

For general amplification

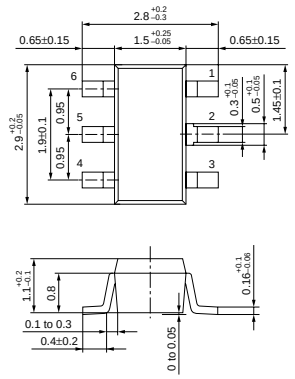
Features

- Two elements incorporated into one package.
- Reduction of the mounting area and assembly cost by one half.

Basic Part Number of Element

- 2SB970 × 2 elements

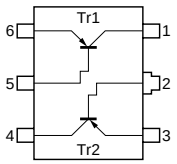
Unit: mm



1 : Collector (Tr1)
2 : Base (Tr2)
3 : Emitter (Tr2)
4 : Collector (Tr2)
5 : Base (Tr1)
6 : Emitter (Tr1)
EIAJ : SC–74
Mini Type Package (6–pin)

Marking Symbol: CV

Internal Connection



Absolute Maximum Ratings (Ta=25˚C)

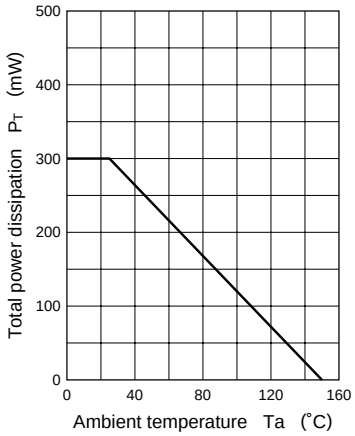
Parameter		Symbol	Ratings	Unit
Rating of element	Collector to base voltage	V_{CBO}	–15	V
	Collector to emitter voltage	V_{CEO}	–10	V
	Emitter to base voltage	V_{EBO}	–7	V
	Collector current	I_C	– 0.5	A
	Peak collector current	I_{CP}	–1	A
Overall	Total power dissipation	P_T	300	mW
	Junction temperature	T_j	150	˚C
	Storage temperature	T_{stg}	–55 to +150	˚C

Electrical Characteristics (Ta=25˚C)

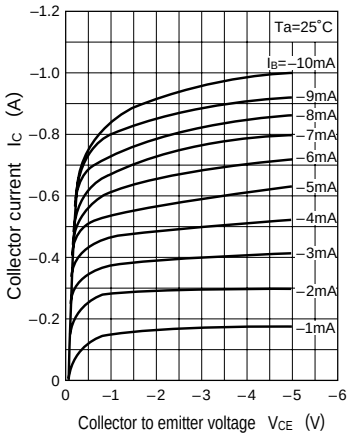
Parameter	Symbol	Conditions	min	typ	max	Unit
Collector to base voltage	V_{CBO}	I_C = –10μA, I_E = 0	–15			V
Collector to emitter voltage	V_{CEO}	I_C = –1mA, I_B = 0	–10			V
Emitter to base voltage	V_{EBO}	I_E = –10μA, I_C = 0	–7			V
Collector cutoff current	I_{CBO}	V_{CB} = –10V, I_E = 0			– 0.1	μA
Forward current transfer ratio	h_{FE1}	V_{CE} = –2V, I_C = –500mA*	100		350	
	h_{FE2}	V_{CE} = –2V, I_C = –1A*	60			
Collector to emitter saturation voltage	$V_{CE(sat)}$	I_C = –400mA, I_B = –8mA*		– 0.16	– 0.3	V
Base to emitter saturation voltage	$V_{BE(sat)}$	I_C = –400mA, I_B = –8mA*		–0.8	–1.2	V
Transition frequency	f_T	V_{CB} = –10V, I_E = 50mA, f = 200MHz		130		MHz
Collector output capacitance	C_{ob}	V_{CB} = –10V, I_E = 0, f = 1MHz		22		pF

*Pulse measurement

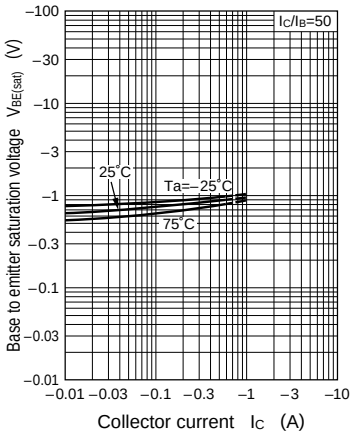
P_T — Ta



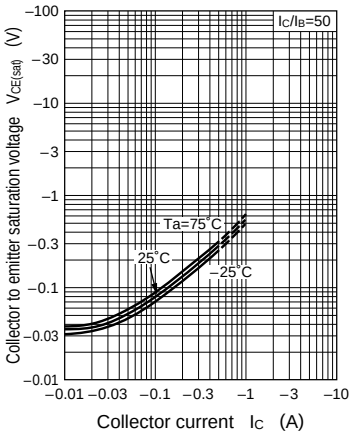
I_C — V_{CE}



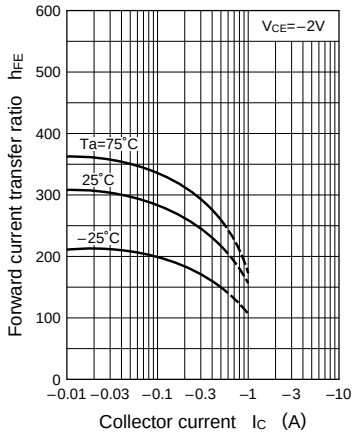
$V_{BE(sat)}$ — I_C



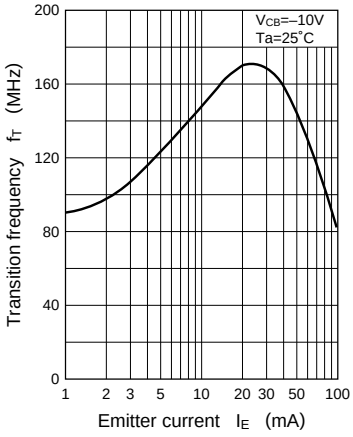
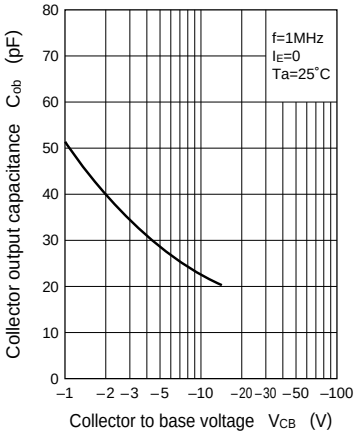
$V_{CE(sat)}$ — I_C



h_{FE} — I_C



f_T — I_E



C_{ob} — V_{CB}