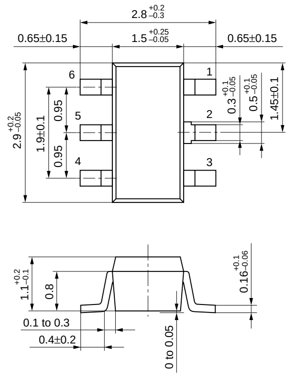
XN4130

Silicon PNP epitaxial planer transistor

For amplification of low frequency output



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

Features

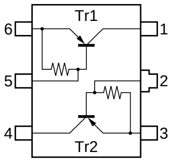
- Two elements incorporated into one package. (Transistors with built-in resistor)
- Reduction of the mounting area and assembly cost by one half.

Basic Part Number of Element

- UN1130 × 2 elements

Marking Symbol: OF

Internal Connection



Absolute Maximum Ratings (Ta=25˚C)

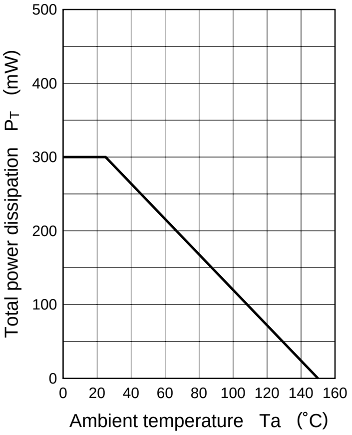
Parameter		Symbol	Ratings	Unit
Rating of element	Collector to base voltage	V_{CBO}	–15	V
	Collector to emitter voltage	V_{CEO}	–15	V
	Emitter to base voltage	V_{EBO}	–7	V
	Collector current	I_C	– 0.5	A
	Peak collector current	I_{CP}	–1	A
Overall	Total power dissipation	P_T	300	mW
	Junction temperature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

Electrical Characteristics (Ta=25˚C)

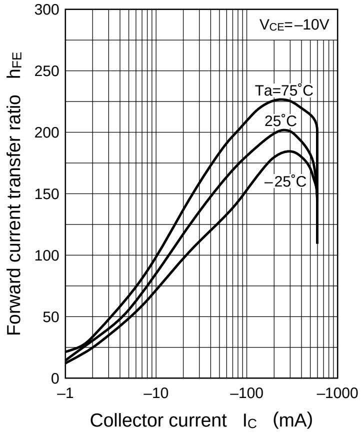
Parameter	Symbol	Conditions	min	typ	max	Unit
Collector to base voltage	V_{CBO}	$I_C = –10μA, I_E = 0$	–15			V
Collector to emitter voltage	V_{CEO}	$I_C = –1mA, I_B = 0$	–15			V
Emitter to base voltage	V_{EBO}	$I_E = –1mA, I_C = 0$	–7			V
Collector cutoff current	I_{CBO}	$V_{CB} = –10V, I_E = 0$			– 0.1	μA
Forward current transfer ratio	h_{FE1}	$V_{CE} = –2V, I_C = –500mA$*	80		280	
	h_{FE2}	$V_{CE} = –2V, I_C = –1A$*	50			
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = –300mA, I_B = –6mA$		– 0.2	– 0.3	V
Base to emitter saturation voltage	$V_{BE(sat)}$	$I_C = –300mA, I_B = –6mA$		– 0.9	–1.3	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
Base to emitter resistance	R_{BE}		–30%	10	+30%	kΩ

*Pulse measurement

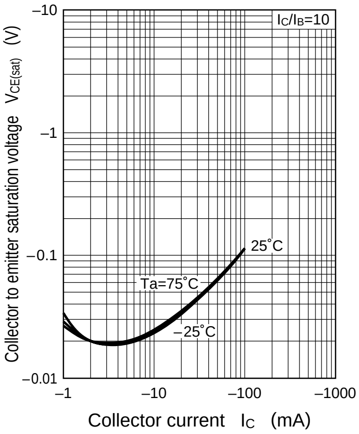
P_T — Ta



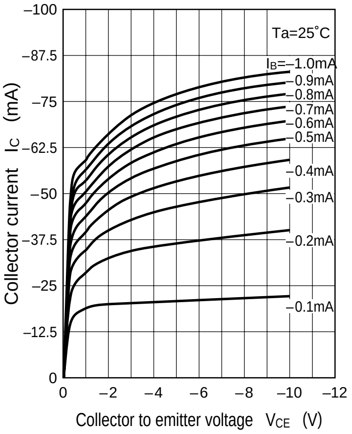
h_{FE} — I_C



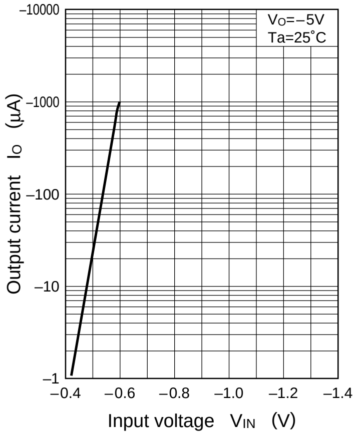
$V_{CE(sat)}$ — I_C



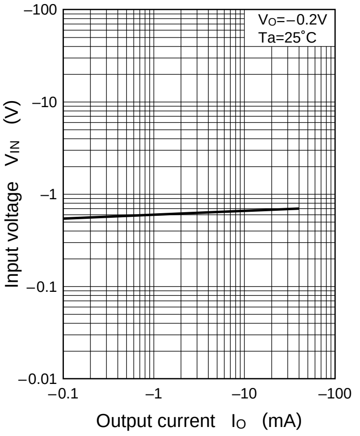
I_C — V_{CE}



I_O — V_{IN}



V_{IN} — I_O



C_{ob} — V_{CB}