# XN04130 (XN4130)

### Silicon PNP epitaxial planar type

For amplification of low-frequency output

#### Features

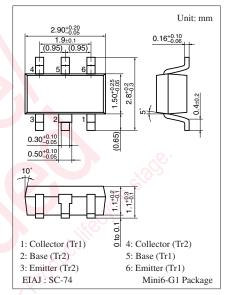
- Two elements incorporated into one package (Transistors with built-in resistor)
- Reduction of the mounting area and assembly cost by one half

#### Basic Part Number

• UNR1130 (UN1130) × 2

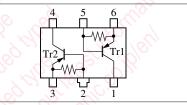
#### Absolute Maximum Ratings $T_a = 25^{\circ}C$

J a							
Parameter	Symbol	Rating	Unit				
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	-15	V				
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	-15	V				
Emitter-base voltage (Collector open)	V <sub>EBO</sub>	-7	V				
Collector current	I <sub>C</sub>	- 0.5	A				
Peak collector current	I <sub>CP</sub>	-1	А				
Total power dissipation	P <sub>T</sub>	300	mW				
Junction temperature	Tj	150	°C				
Storage temperature	T <sub>stg</sub>	-55 to +150	°C €				
			111				



#### Marking Symbol: OF

#### Internal Connection



#### Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

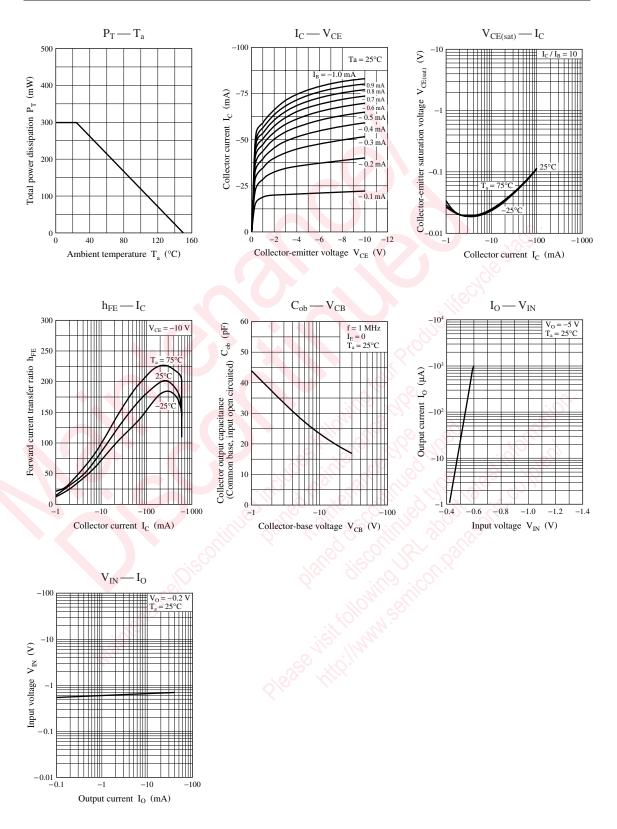
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	$I_{\rm C} = -10 \ \mu {\rm A}, \ I_{\rm E} = 0$	-15			V
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	$I_{\rm C} = -1 \text{ mA}, I_{\rm B} = 0$	-15			V
Emitter-base voltage (Collector open)	V <sub>EBO</sub>	$I_{\rm E} = -1 \text{ mA}, I_{\rm C} = 0$	-7			V
Collector-base cutoff current (Emitter open)	I <sub>CBO</sub>	$V_{CB} = -10 \text{ V}, I_E = 0$			- 0.1	μΑ
Forward current transfer ratio *	h <sub>FE1</sub>	$V_{CE} = -2 V, I_C = -500 mA$	80		280	
	h <sub>FE2</sub>	$V_{CE} = -2 V, I_C = -1 A$	50			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	$I_{C} = -300 \text{ mA}, I_{B} = -6 \text{ mA}$		- 0.2	- 0.3	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	$I_{\rm C} = -300 \text{ mA}, I_{\rm B} = -6 \text{ mA}$		- 0.9	-1.3	V
Transition frequency	f <sub>T</sub>	$V_{CB} = -10 \text{ V}, I_E = 50 \text{ mA}, f = 200 \text{ MHz}$		130		MHz
Collector output capacitance	C <sub>ob</sub>	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		22		pF
(Common base, input open circuited)						
Base-emitter resistance	R <sub>BE</sub>		-30%	10	+30%	kΩ

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors. 2. \*: Pulse measurement

Note) The part number in the parenthesis shows conventional part number.

#### XN04130





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