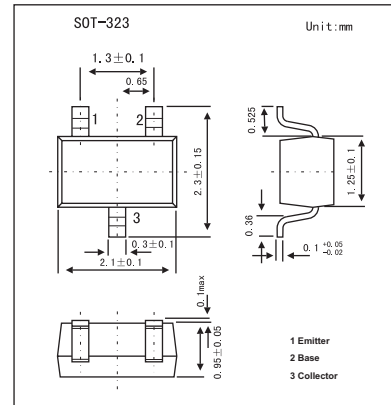


## Silicon NPN Epitaxial Planar

## 2SC3930

## ■ Features

- Optimum for RF amplification of FM/AM radios.
- High transition frequency fr.



## ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V <sub>CB0</sub>	30	V
Collector-emitter voltage	V <sub>CEO</sub>	20	V
Emitter-base voltage	V <sub>EBO</sub>	5	V
Collector current	I <sub>C</sub>	30	mA
Collector power dissipation	P <sub>C</sub>	150	mW
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

## ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base cutoff current	I <sub>CBO</sub>	V <sub>CB</sub> = 10 V, I <sub>E</sub> = 0			0.1	μA
Forward current transfer ratio	h <sub>FE</sub>	V <sub>CB</sub> = 10 V, I <sub>E</sub> = -1 mA	70		220	
Transition frequency	f <sub>T</sub>	V <sub>CB</sub> = 10 V, I <sub>E</sub> = -1 mA, f = 200 MHz	150	250		MHz
Noise figure	N <sub>f</sub>	V <sub>CB</sub> = 10 V, I <sub>E</sub> = -1 mA, f = 5 MHz		2.8	4.0	dB
Reverse transfer impedance	Z <sub>rb</sub>	V <sub>CB</sub> = 10 V, I <sub>E</sub> = -1 mA, f = 2 MHz		22	50	Ω
Reverse transfer capacitance	C <sub>re</sub>	V <sub>CB</sub> = 10 V, I <sub>E</sub> = -1 mA, f = 10.7 MHz		0.9	1.5	pF

## ■ hFE Classification

Marking	VB	VC
hFE	70~140	110~220