# 2SC4410

# Silicon NPN epitaxial planer type

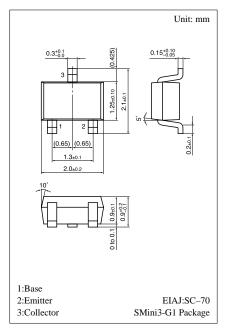
## For UHF amplification

#### Features

- Allowing the small current and low voltage operation.
- High transition frequency f<sub>T</sub>.
- S-Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing.

### Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Ratings	Unit	
Collector to base voltage	$V_{CBO}$	10	V	
Collector to emitter voltage	$V_{CEO}$	7	V	
Emitter to base voltage	$V_{\mathrm{EBO}}$	2	V	
Collector current	$I_{C}$	10	mA	
Collector power dissipation	$P_{C}$	50	mW	
Junction temperature	T <sub>j</sub>	150	°C	
Storage temperature	$T_{\rm stg}$	<b>−55 ~ +150</b>	°C	



Marking symbol: 2X

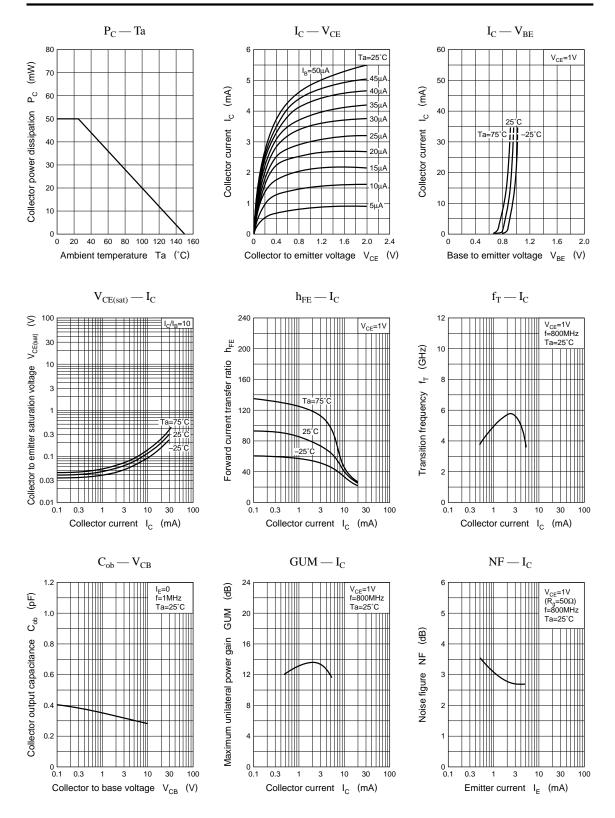
### Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I <sub>CBO</sub>	$V_{CB} = 10V, I_{E} = 0$			1	μА
Emitter cutoff current	I <sub>EBO</sub>	$V_{EB} = 1.5V, I_C = 0$			1	μΑ
Forward current transfer ratio	h <sub>FE</sub>	$V_{CE} = 1V$ , $I_C = 1mA$	50		200	
Transition frequency	$f_T$	$V_{CE} = 1V, I_{C} = 1mA, f = 800MHz$		4		GHz
Collector output capacitance	C <sub>ob</sub>	$V_{CB} = 1V, I_{E} = 0, f = 1MHz$		0.4		pF
Foward transfer gain	$ S_{21e} ^2$	$V_{CE} = 1V, I_{C} = 1mA, f = 800MHz$		6.0		dB
Maximum unilateral power gain	GUM	$V_{CE} = 1V, I_{C} = 1mA, f = 800MHz$		15		dB
Noise figure	NF	$V_{CE} = 1V, I_{C} = 1mA, f = 800MHz$		3.5		dB

Note: Handle the product with care because this is sensitive to the electrostatic breakdown by its structure.

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Transistor 2SC4410



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