# XP06534 (XP6534)

# Silicon NPN epitaxial planer transistor

For high-frequency amplification

## Features

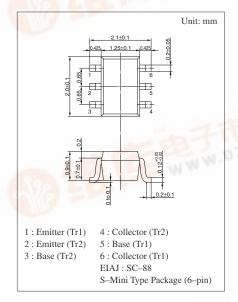
- Two elements incorporated into one package.
- Reduction of the mounting area and assembly cost by one half.

## Basic Part Number of Element

•  $2SC2404 \times 2$  elements

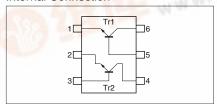
# Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Ratings	Unit
Collector to base voltage	$V_{CBO}$	30	V
Collector to emitter voltage	$V_{CEO}$	20	V
Emitter to base voltage	$V_{EBO}$	3	V
Collector current	$I_{C}$	15	mA
Total power dissipation	$P_{T}$	150	mW
Junction temperature	$T_{j}$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C
	Collector to base voltage Collector to emitter voltage Emitter to base voltage Collector current Total power dissipation Junction temperature		



Marking Symbol: 7F

#### Internal Connection

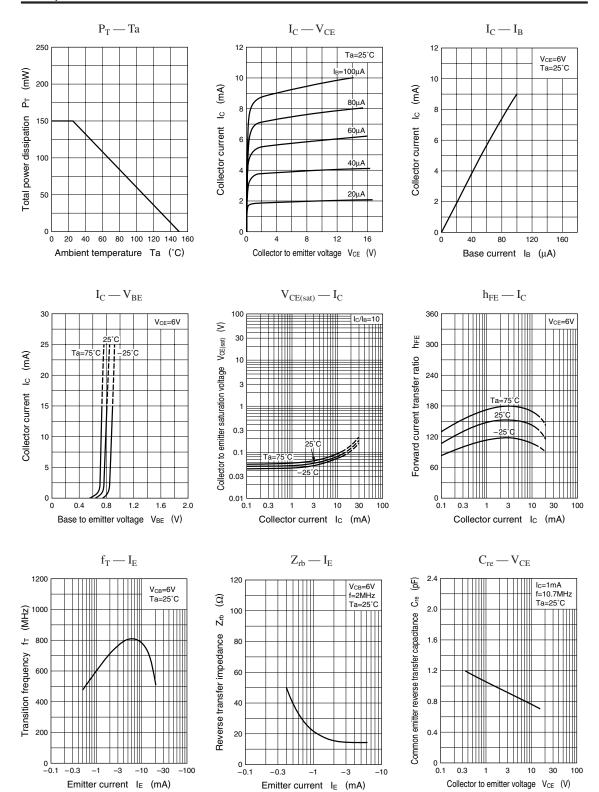


## Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector to base voltage	V <sub>CBO</sub>	$I_{\rm C} = 10 \mu A, I_{\rm E} = 0$	30			V
Emitter to base voltage	V <sub>EBO</sub>	$I_E = 10\mu A, I_C = 0$	3		- W	V
Forward current transfer ratio	h <sub>FE</sub>	$V_{CB} = 6V, I_{E} = -1mA$	40		260	
Forward current transfer h <sub>FE</sub> ratio	h <sub>FE</sub> (small/large)*1	$V_{CB} = 6V, I_{E} = -1mA$	0.5	0.99		
Base to emitter voltage	V <sub>BE</sub>	$V_{CB} = 6V, I_{E} = -1mA$		720		mV
Common emitter reverse transfer capacitance	C <sub>re</sub>	$V_{CB} = 6V, I_{E} = -1 \text{mA}, f = 10.7 \text{MHz}$		0.8	1	pF
Transition frequency	$f_{\mathrm{T}}$	$V_{CB} = 6V$ , $I_E = -1$ mA, $f = 200$ MHz	450	650		MHz
Noise figure	NF	$V_{CB} = 6V, I_{E} = -1 \text{mA}, f = 100 \text{MHz}$		3.3		dB
Power gain	PG	$V_{CB} = 6V, I_E = -1mA, f = 100MHz$		24		dB

<sup>\*1</sup> Ratio between 2 elements





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