XN06534 (XN6534)

Silicon NPN epitaxial planer transistor

For high-frequency amplification

Features

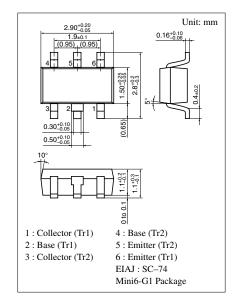
- Two elements incorporated into one package.
- Reduction of the mounting area and assembly cost by one half.

Basic Part Number of Element

• $2SC2404 \times 2$ elements

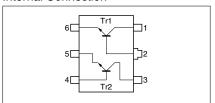
Absolute Maximum Ratings (Ta=25°C)

Parameter		Symbol	Ratings	Unit	
Rating of element	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	
Overall	Total power dissipation	P_{T}	200	mW	
	Junction temperature	T_{j}	150	°C	
	Storage temperature	T_{stg}	-55 to +150	°C	



Marking Symbol: 7F

Internal Connection

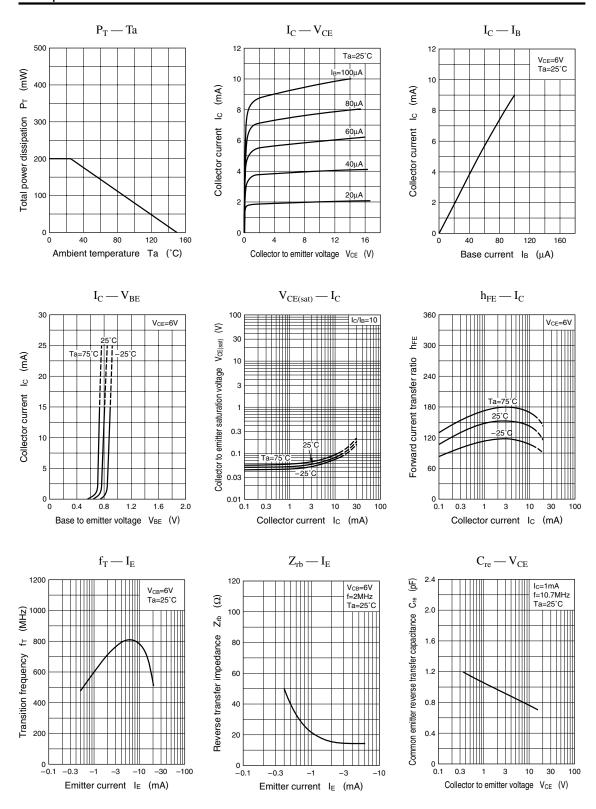


Electrical Characteristics (Ta=25°C)

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

^{*1} Ratio between 2 elements

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