

XN06534 (XN6534)

Silicon NPN epitaxial planar type

For high-frequency amplification

■ Features

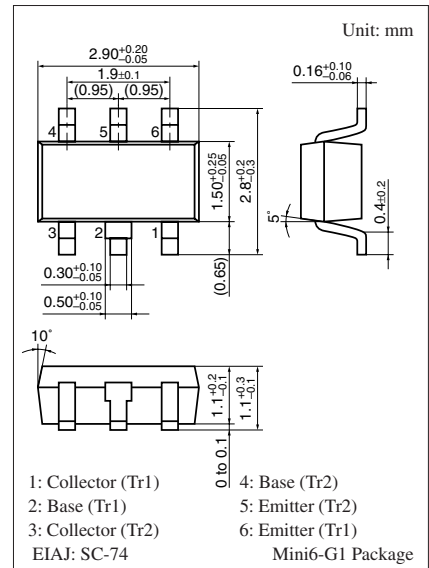
- Two elements incorporated into one package
- Reduction of the mounting area and assembly cost by one half

■ Basic Part Number

- 2SC2404 × 2

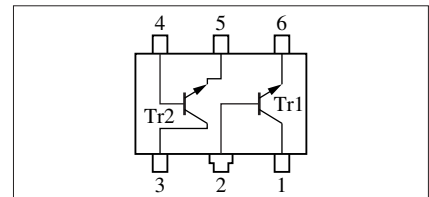
■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V_{CBO}	30	V
Collector-emitter voltage (Base open)	V_{CEO}	20	V
Emitter-base voltage (Collector open)	V_{EBO}	3	V
Collector current	I_C	15	mA
Total power dissipation	P_T	200	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$



Marking Symbol: 7F

Internal Connection



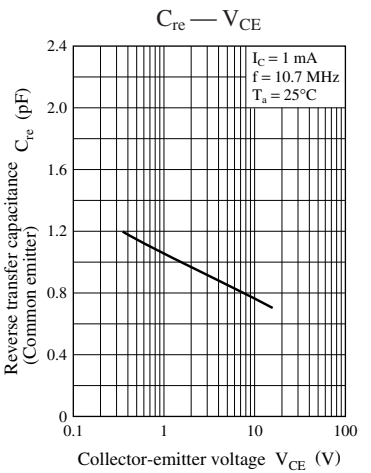
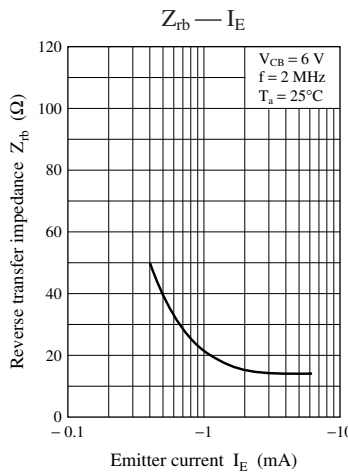
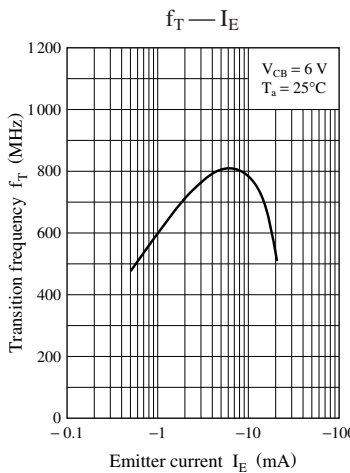
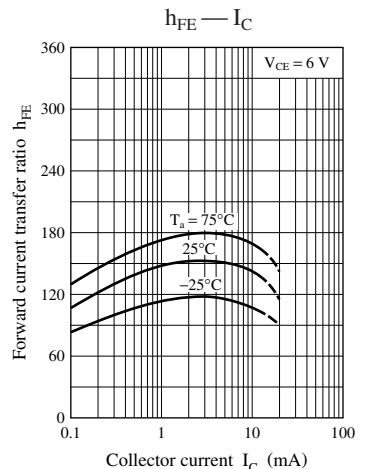
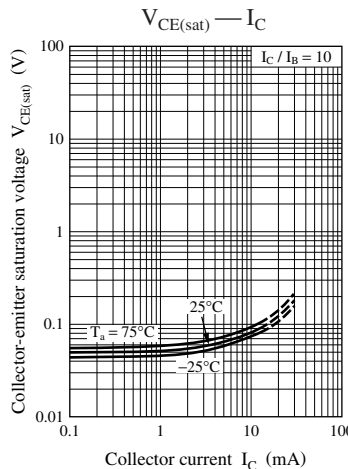
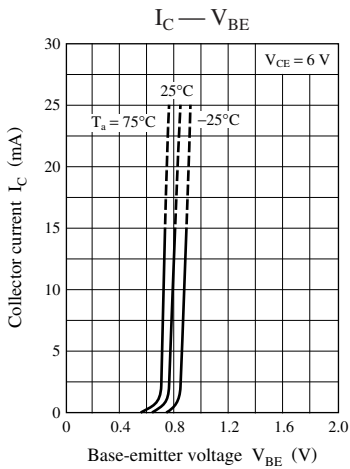
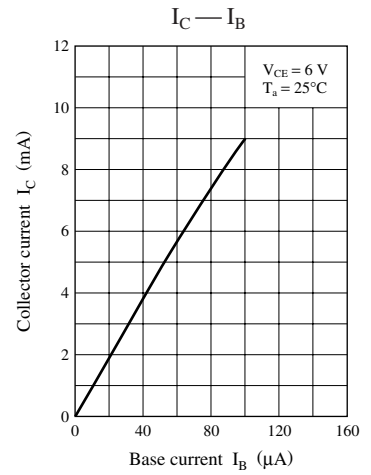
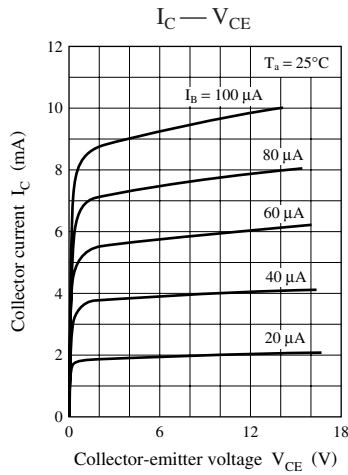
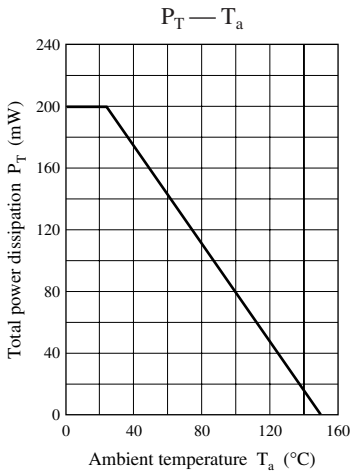
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_C = 10 \mu\text{A}, I_E = 0$	30			V
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = 10 \mu\text{A}, I_C = 0$	3			V
Base-emitter voltage	V_{BE}	$V_{CB} = 6 \text{ V}, I_E = -1 \text{ mA}$		720		mV
Forward current transfer ratio	h_{FE}	$V_{CB} = 6 \text{ V}, I_E = -1 \text{ mA}$	40		260	—
h_{FE} ratio *	$h_{FE(\text{Small})}$ $/h_{FE(\text{Large})}$	$V_{CB} = 6 \text{ V}, I_E = -1 \text{ mA}$	0.50	0.99		—
Transition frequency	f_T	$V_{CB} = 6 \text{ V}, I_E = -1 \text{ mA}, f = 200 \text{ MHz}$	450	650		MHz
Reverse transfer capacitance (Common emitter)	C_{re}	$V_{CB} = 6 \text{ V}, I_E = -1 \text{ mA}, f = 10.7 \text{ MHz}$		0.8	1.0	pF
Power gain	G_p	$V_{CB} = 6 \text{ V}, I_E = -1 \text{ mA}, f = 100 \text{ MHz}$		24		dB
Noise figure	NF	$V_{CB} = 6 \text{ V}, I_E = -1 \text{ mA}, f = 100 \text{ MHz}$		3.3		dB

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2. *: Ratio between 2 elements

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



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