

2SC3354

Silicon NPN epitaxial planar type

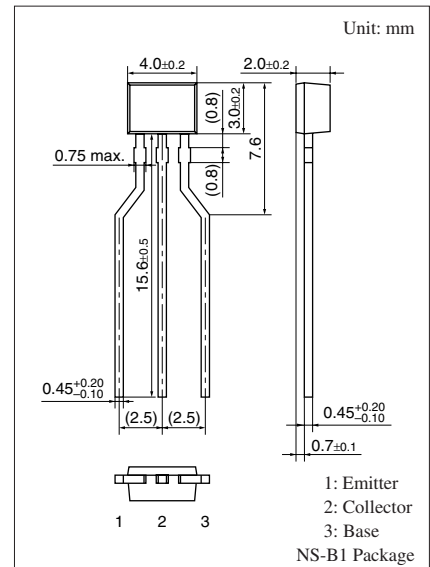
For high-frequency amplification/oscillation/mixing

■ Features

- Optimum for high-density mounting
- Allowing supply with the radial taping
- High transition frequency f_T

■ 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}	50	mA
Collector power dissipation	P_{C}	300	mW
Junction temperature	T_{j}	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$



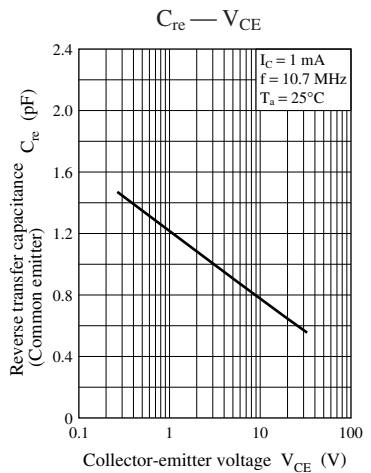
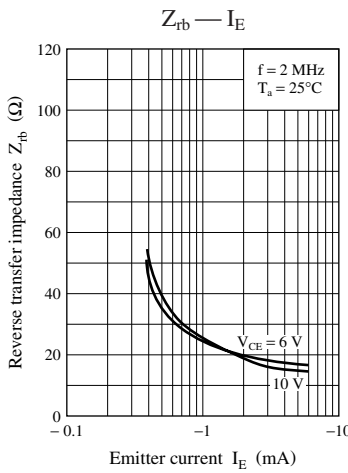
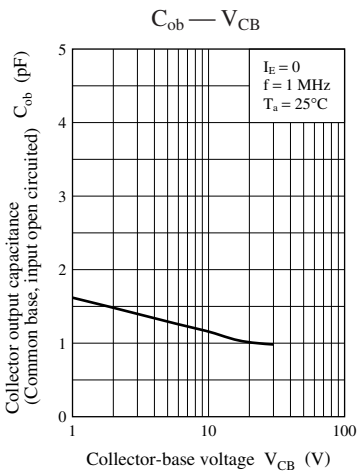
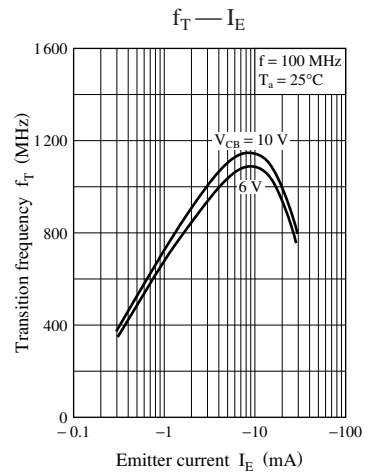
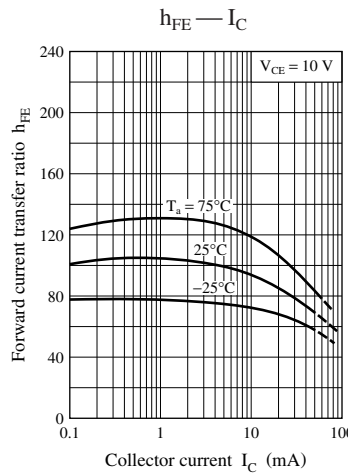
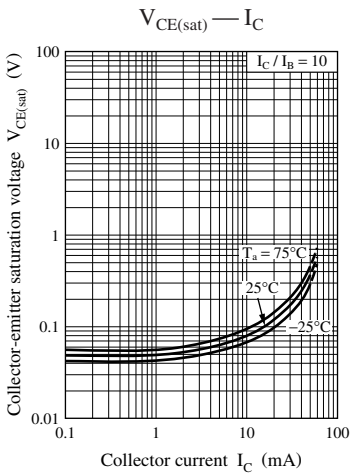
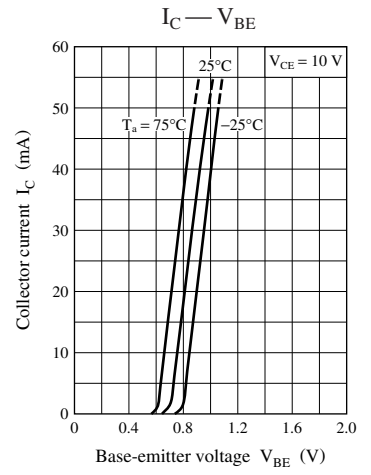
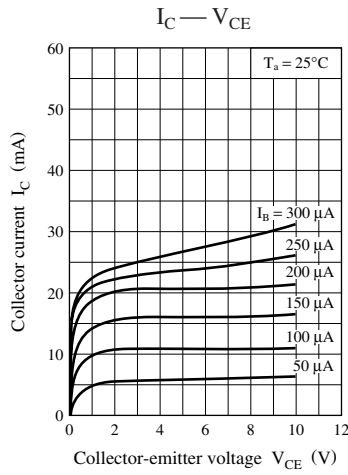
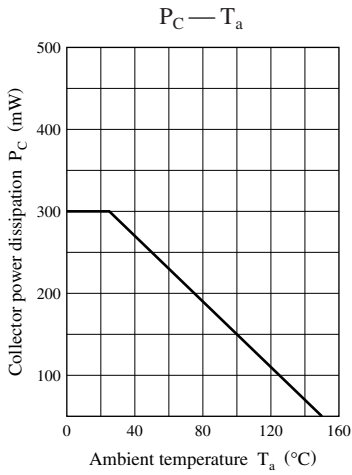
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

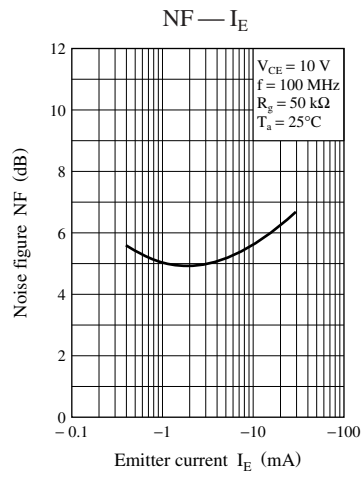
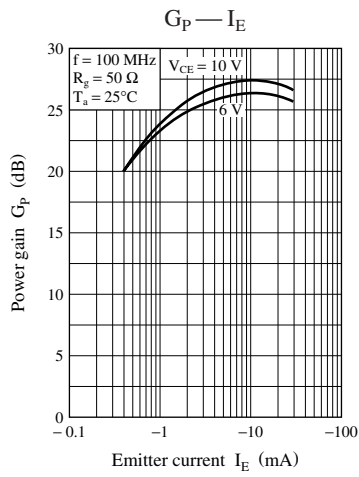
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_{\text{C}} = 100 \mu\text{A}, I_{\text{E}} = 0$	30			V
Emitter-base voltage (Collector open)	V_{EBO}	$I_{\text{E}} = 10 \mu\text{A}, I_{\text{C}} = 0$	3			V
Base-emitter voltage	V_{BE}	$V_{\text{CB}} = 10 \text{ V}, I_{\text{E}} = -2 \text{ mA}$		720		mV
Forward current transfer ratio *	h_{FE}	$V_{\text{CB}} = 10 \text{ V}, I_{\text{E}} = -2 \text{ mA}$	25		250	—
Transition frequency	f_{T}	$V_{\text{CB}} = 10 \text{ V}, I_{\text{E}} = -15 \text{ mA}, f = 200 \text{ MHz}$	600	1200	1600	MHz
Reverse transfer capacitance (Common base)	C_{rb}	$V_{\text{CE}} = 6 \text{ V}, I_{\text{C}} = 0, f = 1 \text{ MHz}$		0.8		pF
Reverse transfer capacitance (Common emitter)	C_{re}	$V_{\text{CB}} = 10 \text{ V}, I_{\text{E}} = -1 \text{ mA}, f = 10.7 \text{ MHz}$		1.0	1.5	pF
Power gain	G_{P}	$V_{\text{CB}} = 10 \text{ V}, I_{\text{E}} = -1 \text{ mA}, f = 100 \text{ MHz}$		17		dB

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

2. *: Rank classification

Rank	T	S
h_{FE}	600 to 1300	900 to 1600





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