

Composite Transistors

XP04401 (XP4401)

Silicon PNP epitaxial planer transistor

For general amplification

■ Features

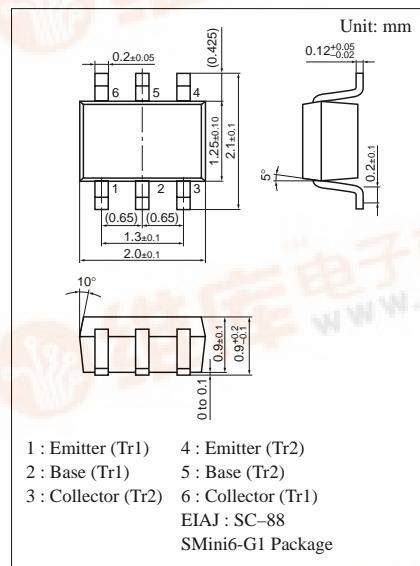
- Two elements incorporated into one package.
- Reduction of the mounting area and assembly cost by one half.

■ Basic Part Number of Element

- 2SB0709A(2SB709A) × 2 elements

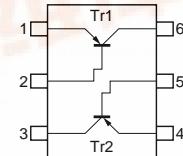
■ Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Ratings	Unit
Rating of element	Collector to base voltage	V _{CBO}	-60
	Collector to emitter voltage	V _{CEO}	-50
	Emitter to base voltage	V _{EBO}	-7
	Collector current	I _C	-100
	Peak collector current	I _{CP}	-200
Overall	Total power dissipation	P _T	150
	Junction temperature	T _j	150
	Storage temperature	T _{stg}	-55 to +150

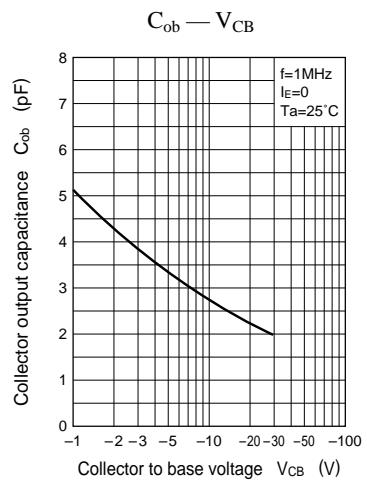
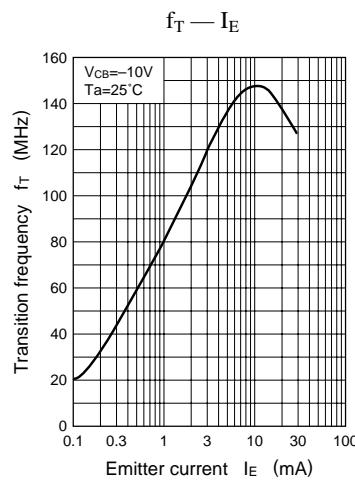
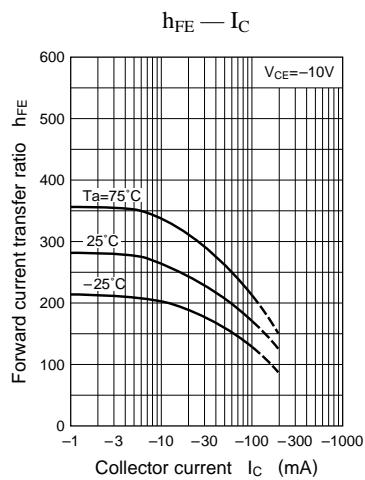
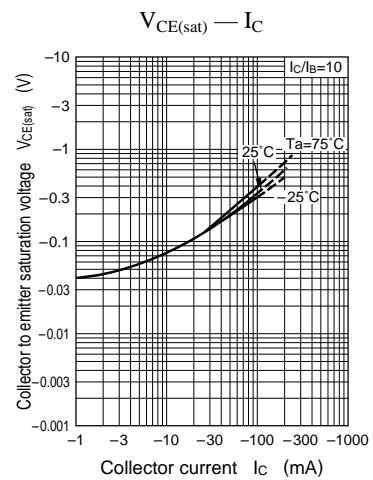
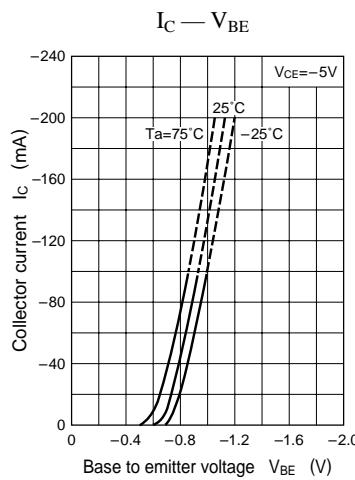
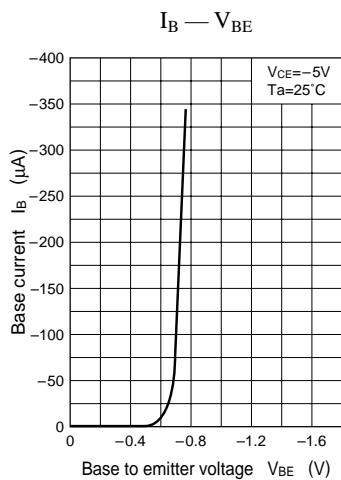
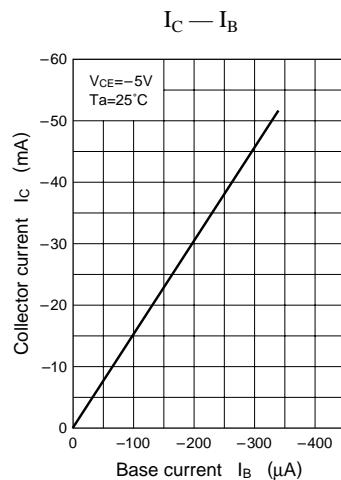
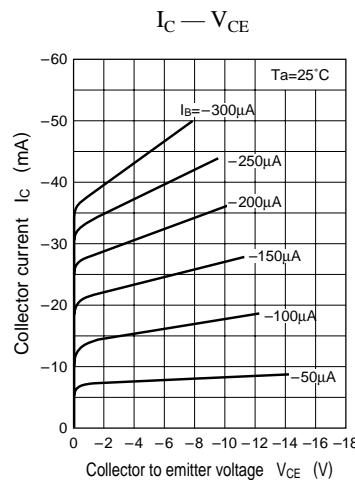
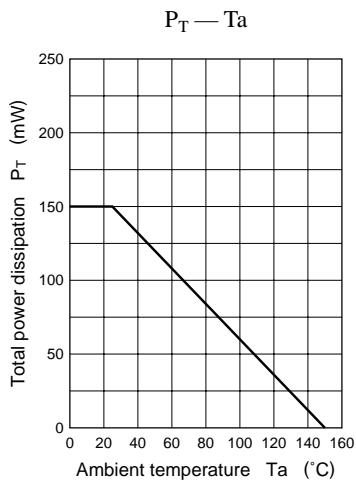


Marking Symbol: 5K

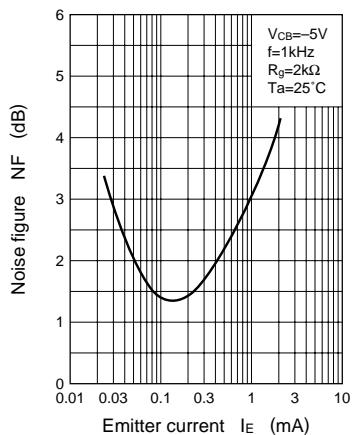
Internal Connection

**■ Electrical Characteristics (Ta=25°C)**

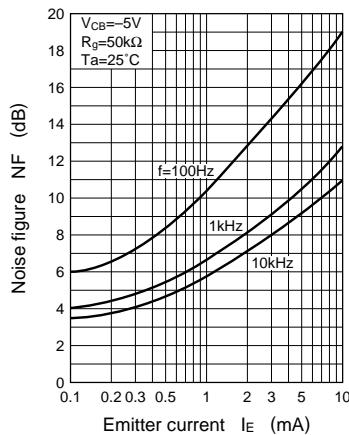
Parameter	Symbol	Conditions	min	typ	max	Unit
Collector to base voltage	V _{CBO}	I _C = -10μA, I _E = 0	-60			V
Collector to emitter voltage	V _{CEO}	I _C = -2mA, I _B = 0	-50			V
Emitter to base voltage	V _{EBO}	I _E = -10μA, I _C = 0	-7			V
Collector cutoff current	I _{CBO}	V _{CB} = -20V, I _E = 0			-0.1	μA
	I _{CEO}	V _{CE} = -10V, I _B = 0			-100	μA
Forward current transfer ratio	h _{FE}	V _{CE} = -10V, I _C = -2mA	160		460	
Collector to emitter saturation voltage	V _{CE(sat)}	I _C = -100mA, I _B = -10mA		-0.3	-0.5	V
Transition frequency	f _T	V _{CB} = -10V, I _E = 1mA, f = 200MHz	80			MHz
Collector output capacitance	C _{ob}	V _{CB} = -10V, I _E = 0, f = 1MHz		2.7		pF



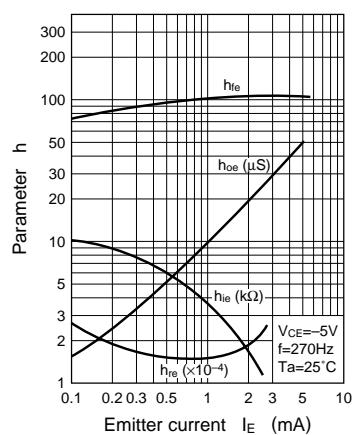
NF — I_E



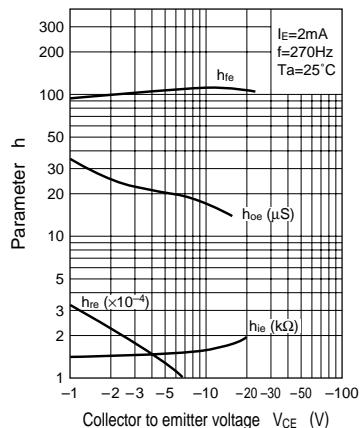
NF — I_E



h Parameter — I_E



h Parameter — V_{CE}



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