

# XP06401 (XP6401)

## Silicon PNP epitaxial planer transistor

For general amplification

### ■ Features

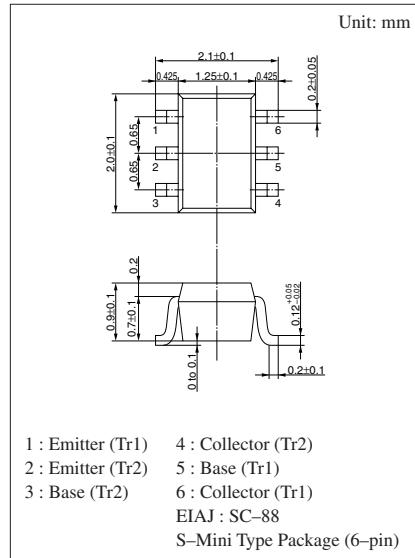
- Two elements incorporated into one package.
- Reduction of the mounting area and assembly cost by one half.

### ■ Basic Part Number of Element

- 2SB0709A(2SB709A)  $\times$  2 elements

### ■ Absolute Maximum Ratings (Ta=25°C)

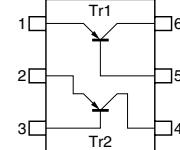
	Parameter	Symbol	Ratings	Unit
Rating of element	Collector to base voltage	V <sub>CBO</sub>	-60	V
	Collector to emitter voltage	V <sub>CEO</sub>	-50	V
	Emitter to base voltage	V <sub>EBO</sub>	-7	V
	Collector current	I <sub>C</sub>	-100	mA
	Peak collector current	I <sub>CP</sub>	-200	mA
Overall	Total power dissipation	P <sub>T</sub>	150	mW
	Junction temperature	T <sub>j</sub>	150	°C
	Storage temperature	T <sub>stg</sub>	-55 to +150	°C



1 : Emitter (Tr1) 4 : Collector (Tr2)  
 2 : Emitter (Tr2) 5 : Base (Tr1)  
 3 : Base (Tr2) 6 : Collector (Tr1)  
 EIAJ : SC-88  
 S-Mini Type Package (6-pin)

Marking Symbol: 5O

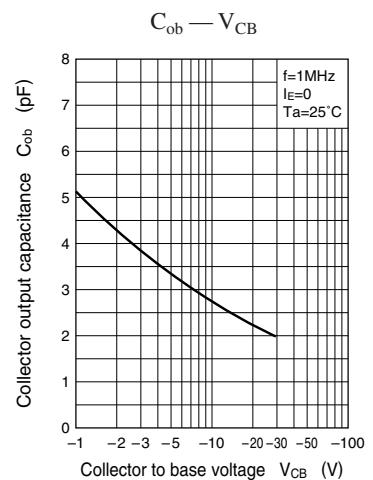
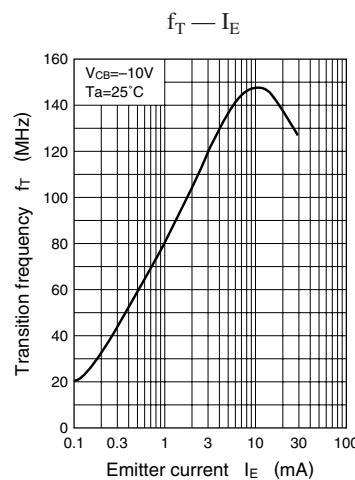
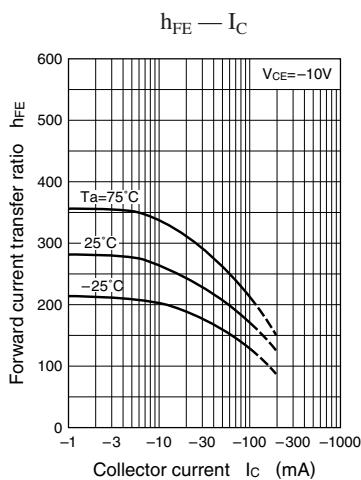
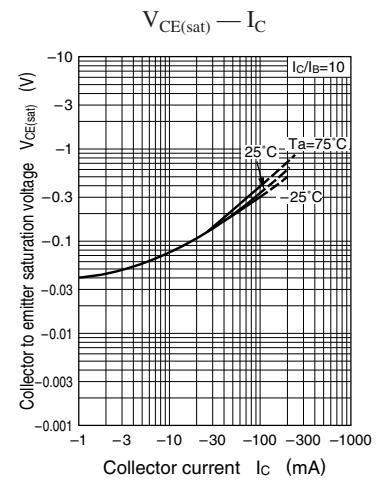
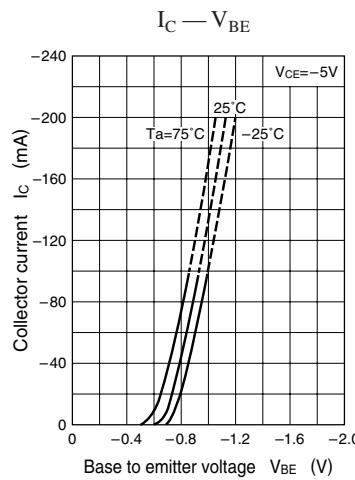
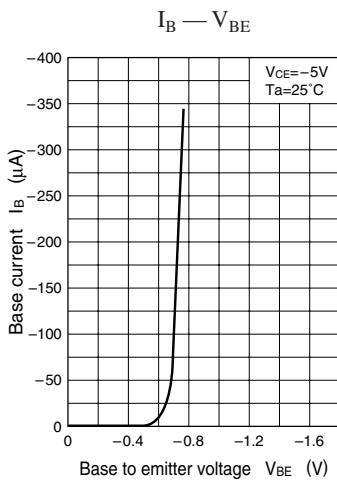
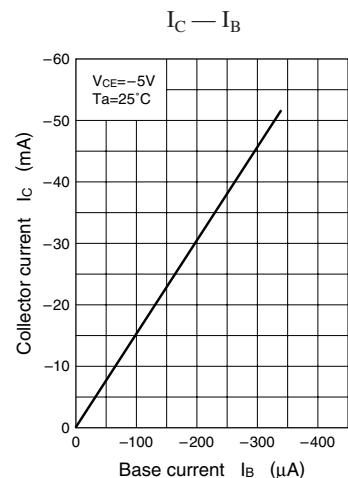
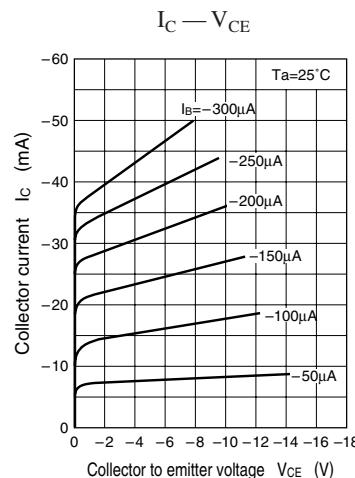
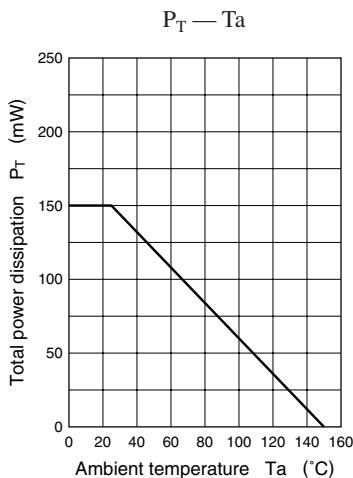
### Internal Connection

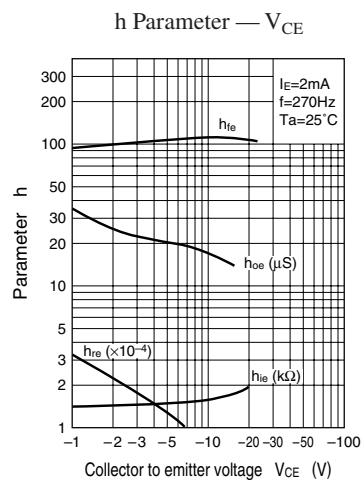
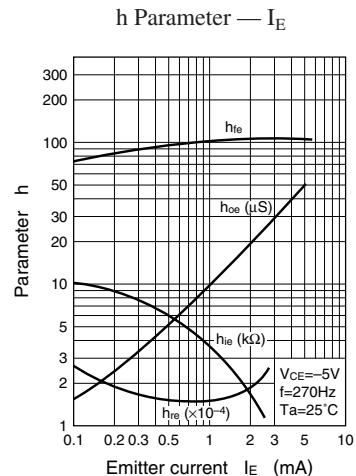
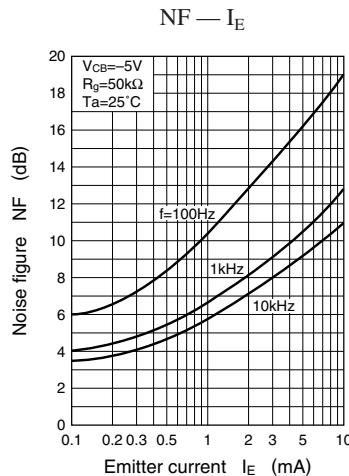
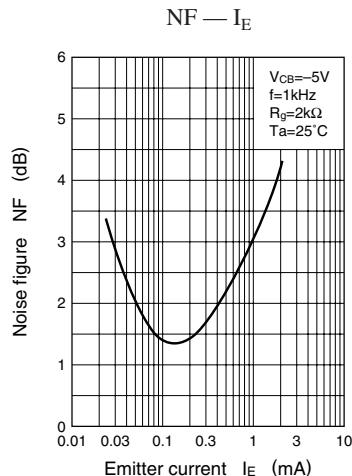


### ■ Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector to base voltage	V <sub>CBO</sub>	I <sub>C</sub> = -10μA, I <sub>E</sub> = 0	-60			V
Collector to emitter voltage	V <sub>CEO</sub>	I <sub>C</sub> = -2mA, I <sub>B</sub> = 0	-50			V
Emitter to base voltage	V <sub>EBO</sub>	I <sub>E</sub> = -10μA, I <sub>C</sub> = 0	-7			V
Collector cutoff current	I <sub>CBO</sub>	V <sub>CB</sub> = -20V, I <sub>E</sub> = 0			- 0.1	μA
	I <sub>CEO</sub>	V <sub>CE</sub> = -10V, I <sub>B</sub> = 0			-100	μA
Forward current transfer ratio	h <sub>FE</sub>	V <sub>CE</sub> = -10V, I <sub>C</sub> = -2mA	160		460	
Forward current transfer h <sub>FE</sub> ratio	h <sub>FE</sub> (small/large) <sup>*1</sup>	V <sub>CE</sub> = -10V, I <sub>C</sub> = -2mA	0.5	0.99		
Collector to emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = -100mA, I <sub>B</sub> = -10mA		- 0.3	- 0.5	V
Transition frequency	f <sub>T</sub>	V <sub>CB</sub> = -10V, I <sub>E</sub> = 1mA, f = 200MHz		80		MHz
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -10V, I <sub>E</sub> = 0, f = 1MHz		2.7		pF

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





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