

XP06401 (XP6401)

Silicon PNP epitaxial planar transistor

For general amplification

Features

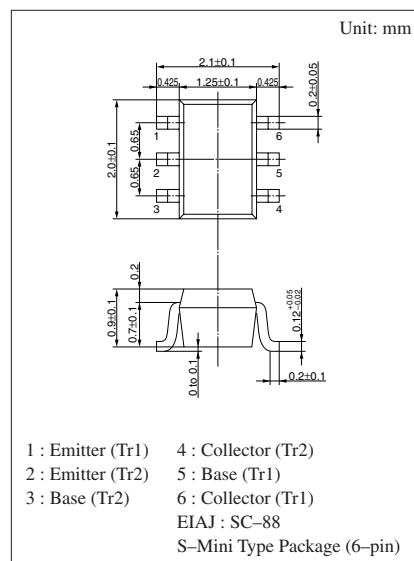
- Two elements incorporated into one package.
- Reduction of the mounting area and assembly cost by one half.

Basic Part Number of Element

- 2SB0709A(2SB709A) × 2 elements

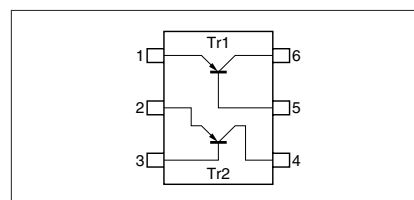
Absolute Maximum Ratings (Ta=25°C)

	Parameter	Symbol	Ratings	Unit
Rating of element	Collector to base voltage	V_{CBO}	-60	V
	Collector to emitter voltage	V_{CEO}	-50	V
	Emitter to base voltage	V_{EBO}	-7	V
	Collector current	I_C	-100	mA
	Peak collector current	I_{CP}	-200	mA
Overall	Total power dissipation	P_T	150	mW
	Junction temperature	T_j	150	°C
	Storage temperature	T_{stg}	-55 to +150	°C



Marking Symbol: 50

Internal Connection

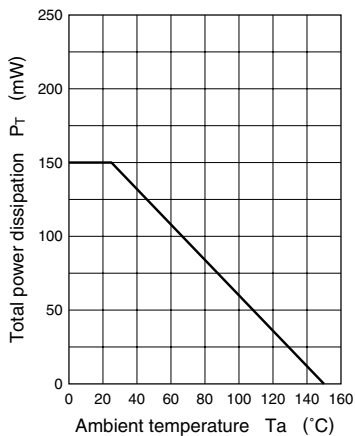
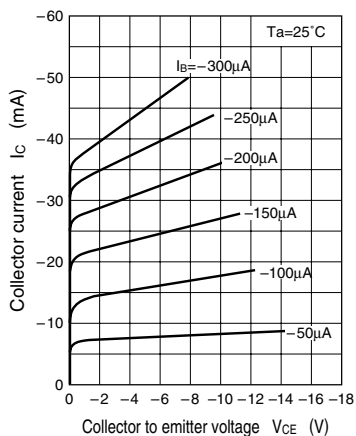
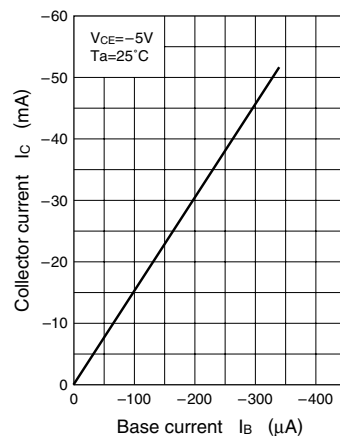
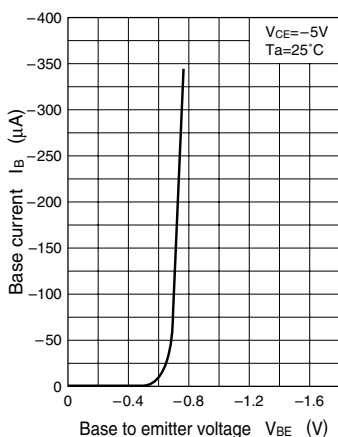
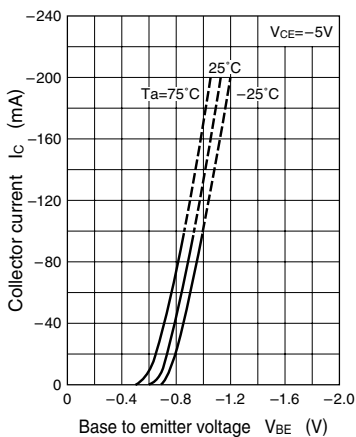
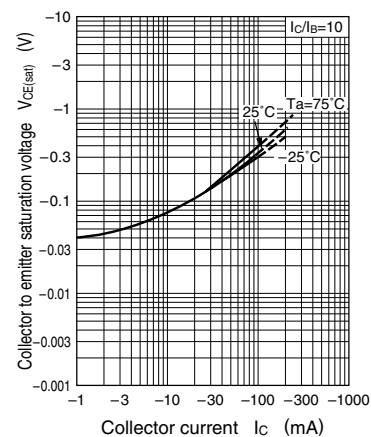
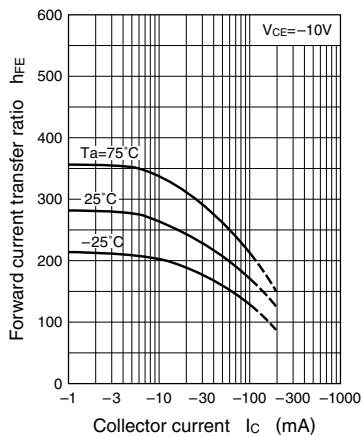
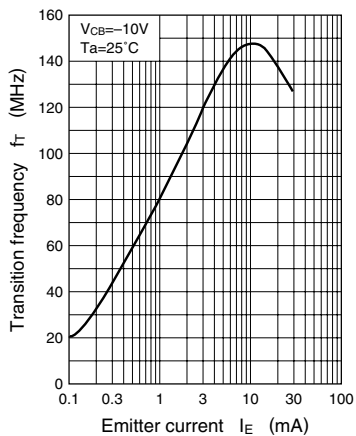
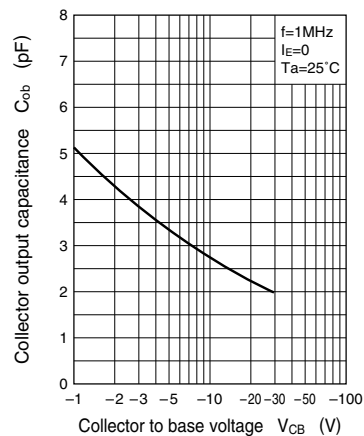


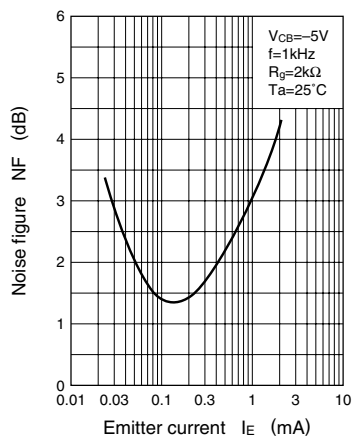
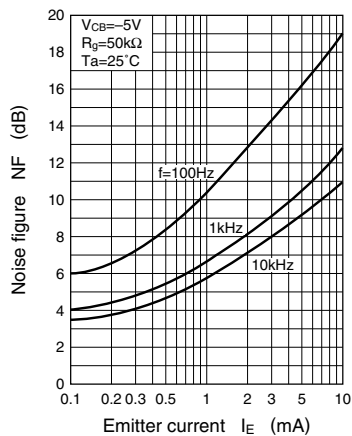
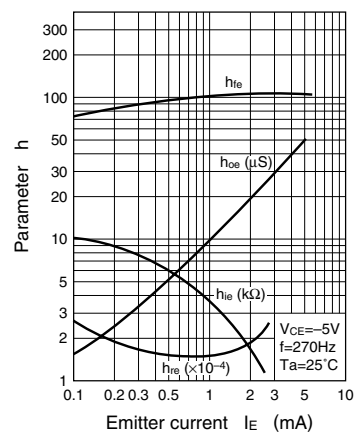
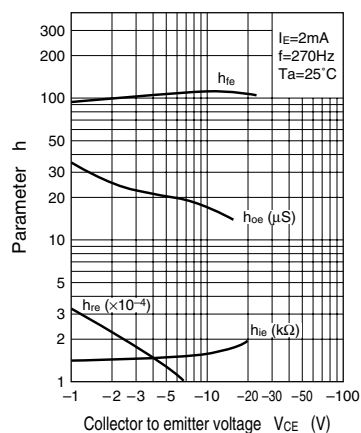
Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector to base voltage	V_{CBO}	$I_C = -10\mu A, I_E = 0$	-60			V
Collector to emitter voltage	V_{CEO}	$I_C = -2mA, I_B = 0$	-50			V
Emitter to base voltage	V_{EBO}	$I_E = -10\mu A, I_C = 0$	-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	
Forward current transfer h_{FE} ratio	$h_{FE}(\text{small/large})^{*1}$	$V_{CE} = -10V, I_C = -2mA$	0.5	0.99		
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

*1 Ratio between 2 elements

Note.) The Part number in the Parenthesis shows conventional part number.

$P_T - T_a$  $I_C - V_{CE}$  $I_C - I_B$  $I_B - V_{BE}$  $I_C - V_{BE}$  $V_{CE(sat)} - I_C$  $h_{FE} - I_C$  $f_T - I_E$  $C_{ob} - V_{CB}$ 

NF — I_E NF — I_E h Parameter — I_E h Parameter — V_{CE} 

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