

UP04501

Silicon NPN epitaxial planar transistor

For general amplification

■ Features

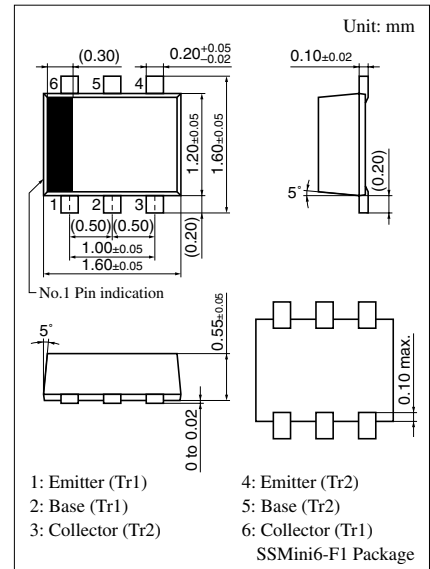
- Two elements incorporated into one package (Each transistor is separated)
- Reduction of the mounting area and assembly cost by one half

■ Basic Part Number of Element

- 2SD0601A (2SD601A) × 2 elements

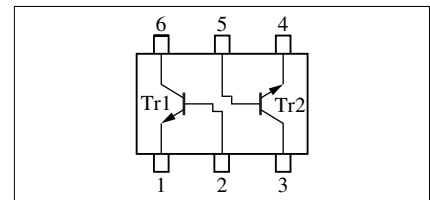
■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

	Parameter	Symbol	Rating	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
Total	Total power dissipation	P_T	125	mW
	Junction temperature	T_j	125	$^\circ\text{C}$
	Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$



Marking Symbol: 5H

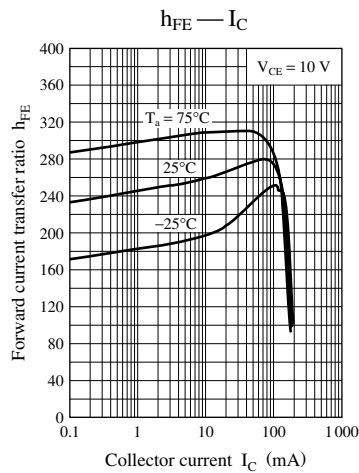
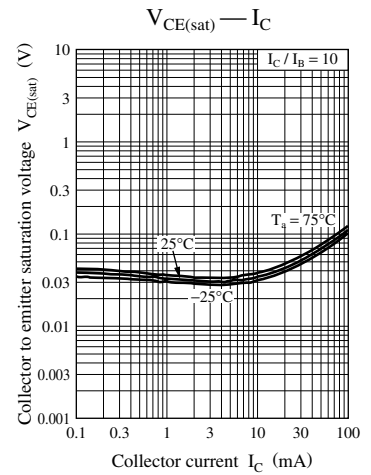
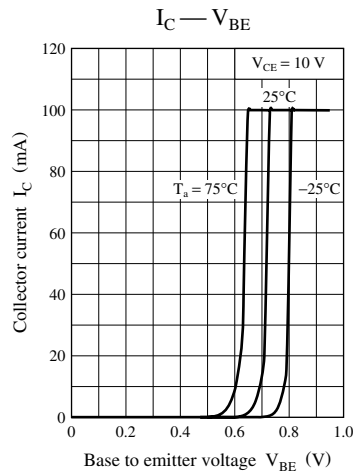
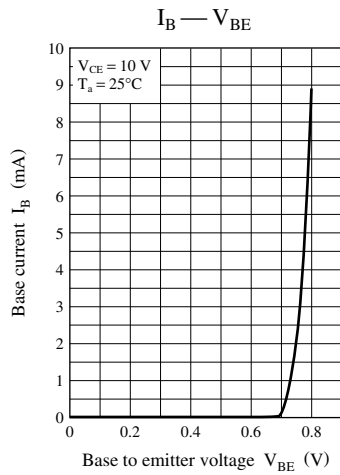
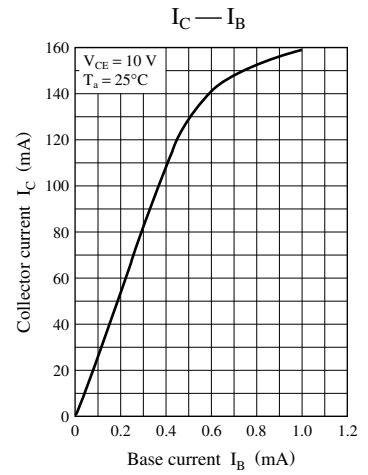
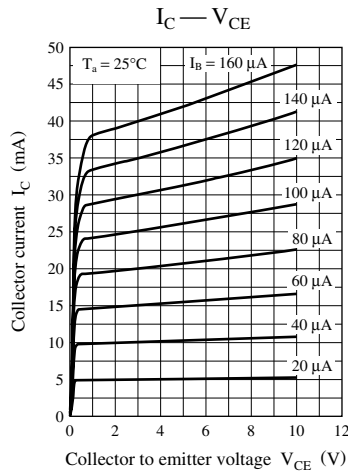
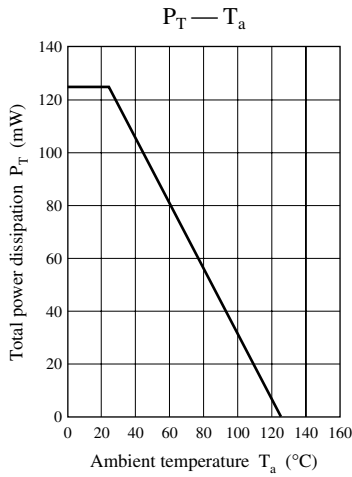
Internal Connection



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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector to base voltage	V_{CBO}	$I_C = 10 \mu\text{A}, I_E = 0$	60			V
Collector to emitter voltage	V_{CEO}	$I_C = 2 \text{mA}, I_B = 0$	50			V
Emitter to base voltage	V_{EBO}	$I_E = 10 \mu\text{A}, I_C = 0$	7			V
Collector cutoff current	I_{CBO}	$V_{CB} = 20 \text{V}, I_E = 0$			0.1	μA
	I_{CEO}	$V_{CE} = 10 \text{V}, I_B = 0$			100	
Forward current transfer ratio	h_{FE}	$V_{CE} = 10 \text{V}, I_C = 2 \text{mA}$	180		390	—
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100 \text{mA}, I_B = 10 \text{mA}$			0.3	V
Collector output capacitance	C_{ob}	$V_{CB} = 10 \text{V}, I_E = 0, f = 1 \text{MHz}$		3.5		pF
Gain bandwidth product	f_T	$V_{CB} = 10 \text{V}, I_E = -2 \text{mA}, f = 200 \text{MHz}$		150		MHz

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



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