

XN05501 (XN5501)

Silicon NPN epitaxial planer transistor

For general amplification

Features

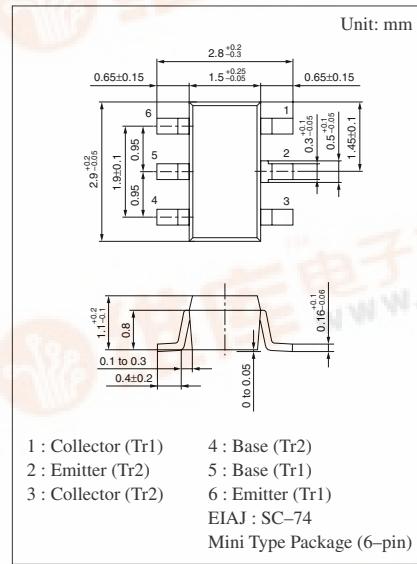
- Two elements incorporated into one package.
- Reduction of the mounting area and assembly cost by one half.

Basic Part Number of Element

- 2SD0601A(2SD601A) × 2 elements

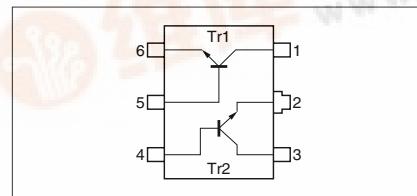
Absolute Maximum Ratings (Ta=25°C)

	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	300	mW
	Junction temperature	T _j	150	°C
	Storage temperature	T _{stg}	-55 to +150	°C



Marking Symbol: 5L

Internal Connection



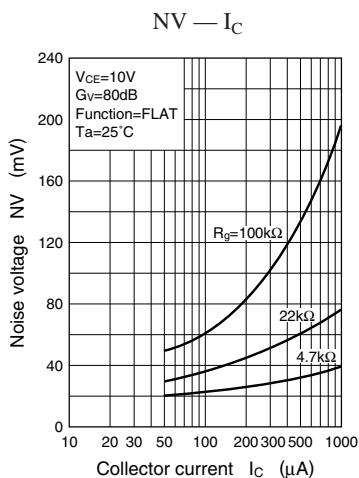
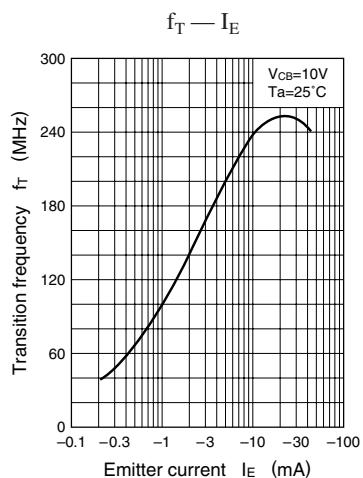
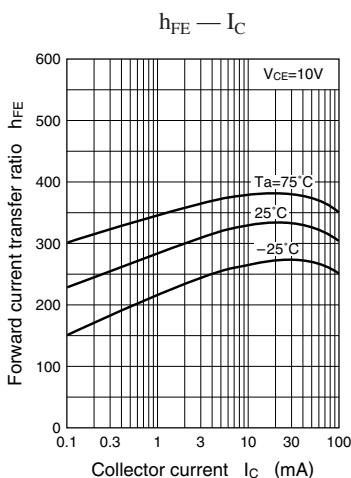
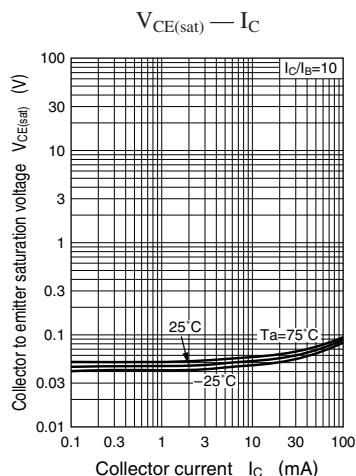
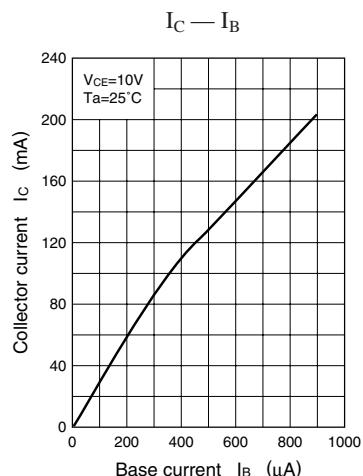
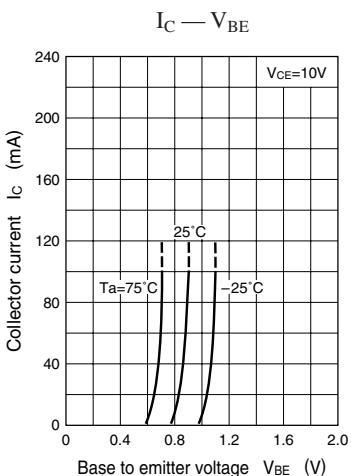
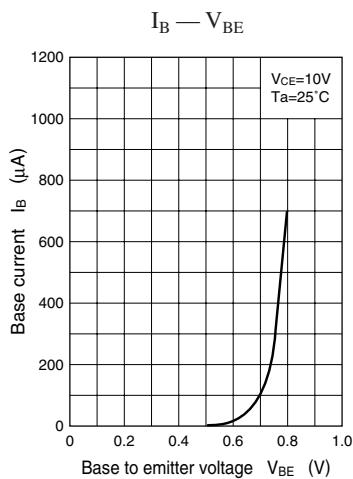
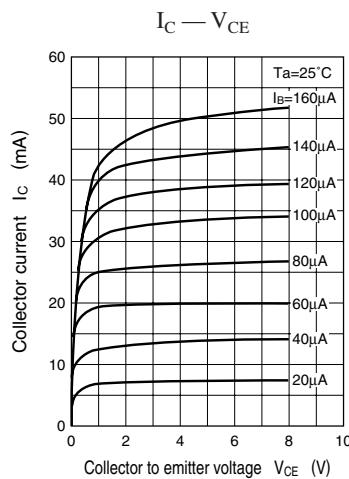
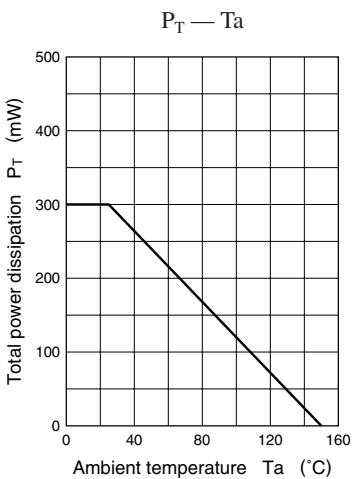
Electrical Characteristics (Ta=25°C)

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	
Forward current transfer h _{FE} ratio	h _{FE} (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		0.1	0.3	V
Transition frequency	f _T	V _{CB} = 10V, I _E = -2mA, f = 200MHz		150		MHz
Collector output capacitance	C _{ob}	V _{CB} = 10V, I _E = 0, f = 1MHz		3.5		pF

^{*1} Ratio between 2 elements

Composite Transistors

XN05501



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