XN04501 (XN4501)

Silicon NPN epitaxial planer transistor

For general amplification

Features

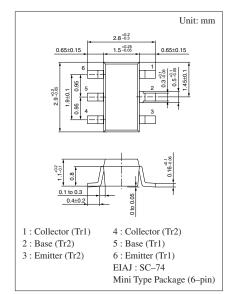
- Two elements incorporated into one package.
- Reduction of the mounting area and assembly cost by one half.

Basic Part Number of Element

• $2SD0601A(2SD601A) \times 2$ elements

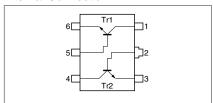
Absolute Maximum Ratings (Ta=25°C)

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	



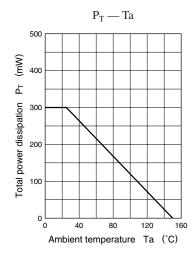
Marking Symbol: 5H

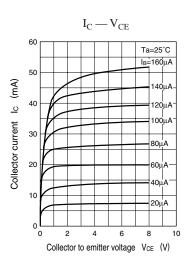
Internal Connection

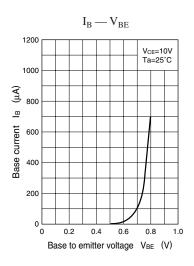


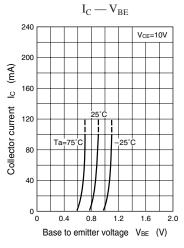
Electrical Characteristics (Ta=25°C)

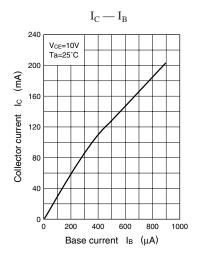
Parameter	Symbol	Conditions	min	typ	max	Unit
Collector to base voltage	V _{CBO}	$I_C = 10\mu A, I_E = 0$	60			V
Collector to emitter voltage	V _{CEO}	$I_C = 2mA, I_B = 0$	50			V
Emitter to base voltage	V _{EBO}	$I_E = 10\mu A, I_C = 0$	7			V
Collector cutoff current	I_{CBO}	$V_{CB} = 20V, I_E = 0$			0.1	μА
Collector cutoff current	I_{CEO}	$V_{CE} = 10V, I_B = 0$			100	μА
Forward current transfer ratio	h_{FE}	$V_{CE} = 10V, I_C = 2mA$	160		460	
Collector to emitter saturation voltage	V _{CE(sat)}	$I_{C} = 100 \text{mA}, I_{B} = 10 \text{mA}$		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

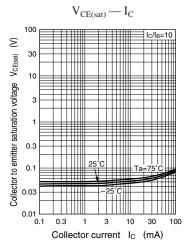


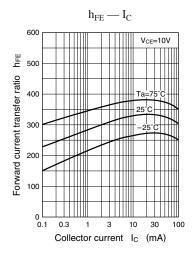


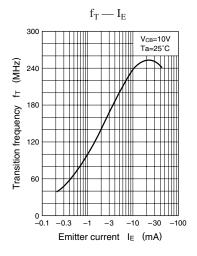


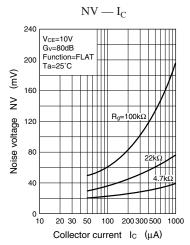












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