

XN01504 (XN1504)

Silicon NPN epitaxial planer transistor

For amplification of low frequency output

■ Features

- Two elements incorporated into one package.
(Emitter-coupled transistors)
- Reduction of the mounting area and assembly cost by one half.

■ Basic Part Number of Element

- 2SD1915F × 2 elements

■ Absolute Maximum Ratings (Ta=25°C)

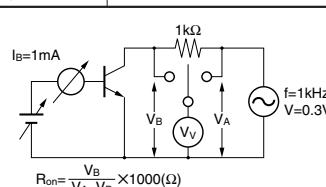
	Parameter	Symbol	Ratings	Unit
Rating of element	Collector to base voltage	V _{CBO}	50	V
	Collector to emitter voltage	V _{CEO}	20	V
	Emitter to base voltage	V _{EBO}	25	V
	Collector current	I _C	300	mA
	Peak collector current	I _{CP}	500	mA
Overall	Total power dissipation	P _T	300	mW
	Junction temperature	T _j	150	°C
	Storage temperature	T _{stg}	-55 to +150	°C

■ Electrical Characteristics (Ta=25°C)

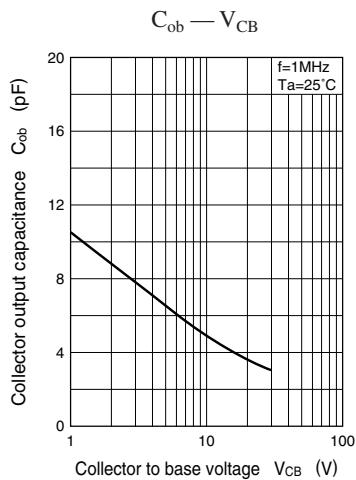
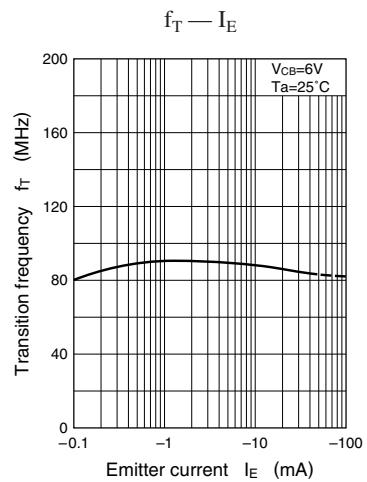
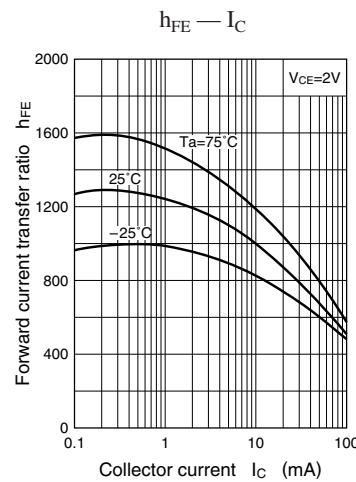
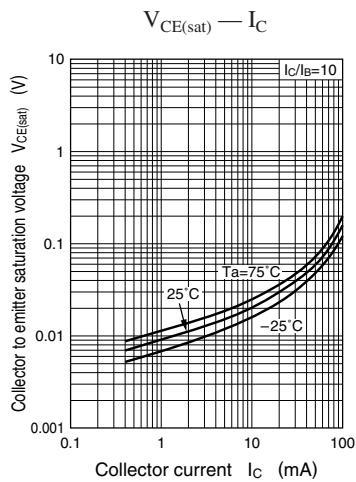
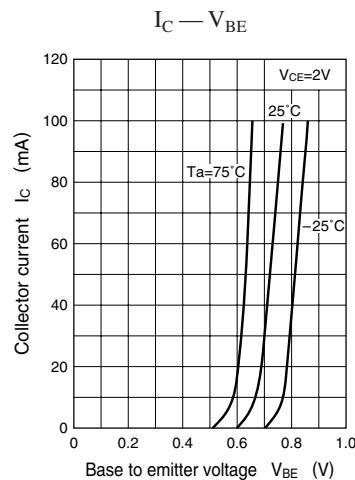
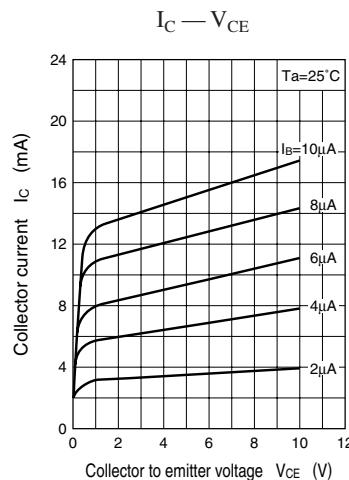
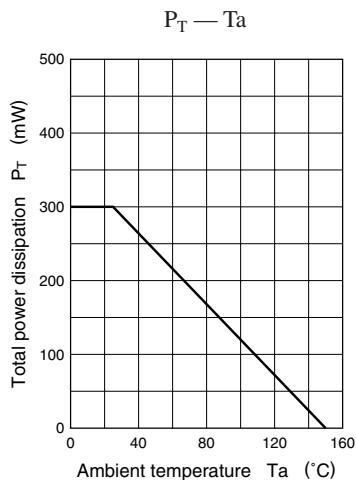
Parameter	Symbol	Conditions	min	typ	max	Unit
Collector to emitter voltage	V _{CEO}	I _C = 1mA, I _B = 0	20			V
Collector cutoff current	I _{CBO}	V _{CB} = 50V, I _E = 0			0.1	μA
Emitter cutoff current	I _{EBO}	V _{EB} = 25V, I _C = 0			0.1	μA
Forward current transfer ratio	h _{FE}	V _{CE} = 2V, I _C = 4mA	500		2500	
Forward current transfer h _{FE} ratio	h _{FE} (small/large) ^{*1}	V _{CE} = 2V, I _C = 4mA	0.5	0.99		
Collector to emitter saturation voltage	V _{CE(sat)}	I _C = 30mA, I _B = 3mA			0.1	V
Base to emitter voltage	V _{BE}	V _{CE} = 2V, I _C = 4mA		0.6		V
Transition frequency	f _T	V _{CB} = 6V, I _E = -4mA, f = 200MHz	80			MHz
Collector output capacitance	C _{ob}	V _{CB} = 10V, I _E = 0, f = 1MHz			7	pF
ON Resistance	R _{on} ^{*2}			1.0		Ω

^{*1} Ratio between 2 elements

^{*2} R_{on} test circuit



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



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