

NP061A3

Silicon PNP epitaxial planar transistor

For digital circuits

■ Features

- SSS-Mini type 6-pin package, reduction of the mounting area and assembly cost by one half
- Maximum package height (0.4 mm) contributes to develop thinner equipments

■ Basic Part Number of Element

- UNR11A3 × 2 elements

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

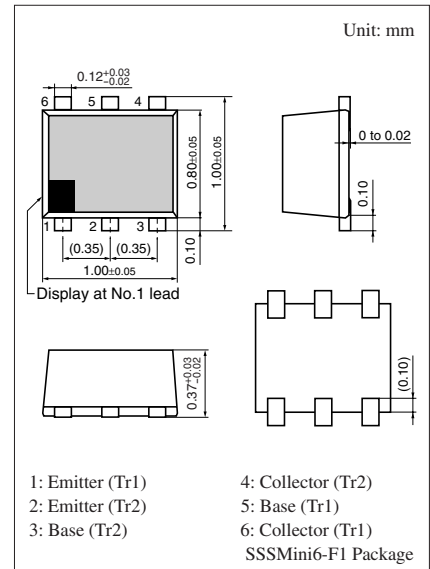
	Parameter	Symbol	Rating	Unit
Rating of element	Collector to base voltage	V_{CBO}	-50	V
	Collector to emitter voltage	V_{CEO}	-50	V
	Collector current	I_{C}	-80	mA
Overall	Total power dissipation *	P_{T}	125	mW
	Junction temperature	T_{j}	125	$^\circ\text{C}$
	Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

Note) *: Measuring on substrate at 17 mm × 10 mm × 1 mm

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

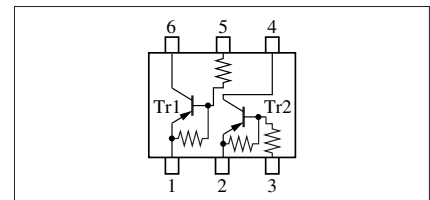
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector to base voltage	V_{CBO}	$I_{\text{C}} = -10 \mu\text{A}, I_{\text{E}} = 0$	-50			V
Collector to emitter voltage	V_{CEO}	$I_{\text{C}} = -2 \text{ mA}, I_{\text{B}} = 0$	-50			V
Collector cutoff current	I_{CBO}	$V_{\text{CB}} = -50 \text{ V}, I_{\text{E}} = 0$			-0.1	μA
	I_{CEO}	$V_{\text{CE}} = -50 \text{ V}, I_{\text{B}} = 0$			-0.5	
Emitter cutoff current	I_{EBO}	$V_{\text{EB}} = -6 \text{ V}, I_{\text{C}} = 0$			-0.1	mA
Forward current transfer ratio	h_{FE}	$V_{\text{CE}} = -10 \text{ V}, I_{\text{C}} = -5 \text{ mA}$	80			—
h_{FE} Ratio *	$h_{\text{FE}}(\text{Small/Large})$	$V_{\text{CE}} = -10 \text{ V}, I_{\text{C}} = -5 \text{ mA}$	0.5	0.99		
Collector to emitter saturation voltage	$V_{\text{CE(sat)}}$	$I_{\text{C}} = -10 \text{ mA}, I_{\text{B}} = -0.3 \text{ mA}$			-0.25	V
High level output voltage	V_{OH}	$V_{\text{CC}} = -5 \text{ V}, V_{\text{B}} = -0.5 \text{ V}, R_{\text{L}} = 1 \text{ k}\Omega$	-4.9			V
Low level output voltage	V_{OL}	$V_{\text{CC}} = -5 \text{ V}, V_{\text{B}} = -3.5 \text{ V}, R_{\text{L}} = 1 \text{ k}\Omega$			-0.2	V
Input resistance	R_1		-30%	47	+30%	k Ω
Resistance ratio	R_1 / R_2		0.8	1.0	1.2	—
Gain bandwidth product	f_{T}	$V_{\text{CB}} = -10 \text{ V}, I_{\text{E}} = 1 \text{ mA}, f = 200 \text{ MHz}$		80		MHz

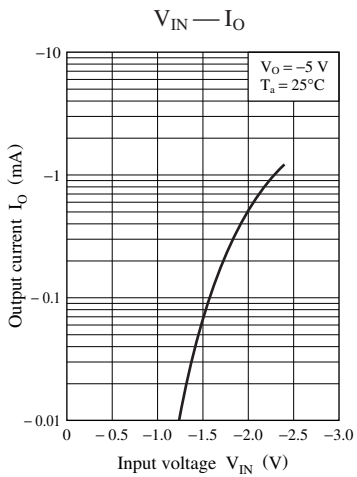
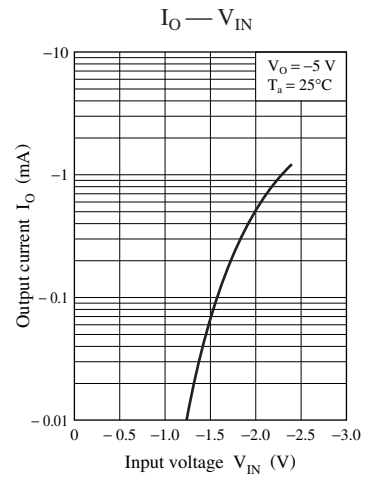
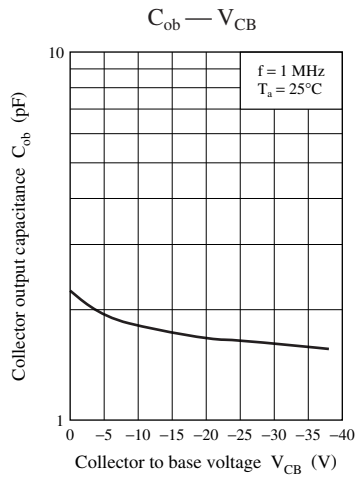
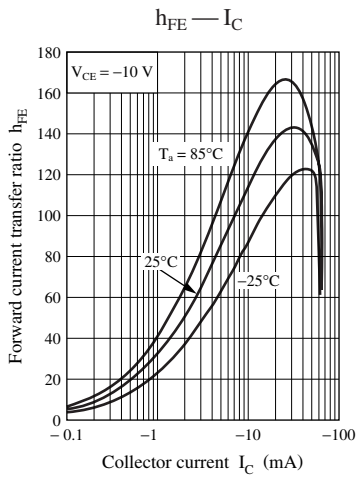
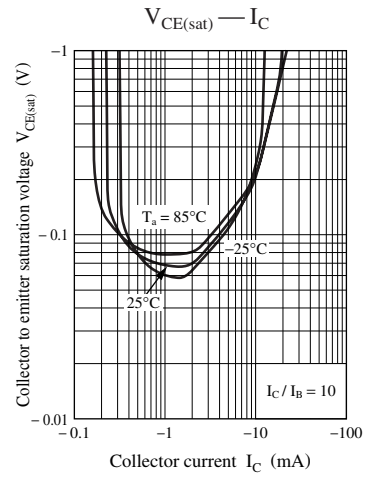
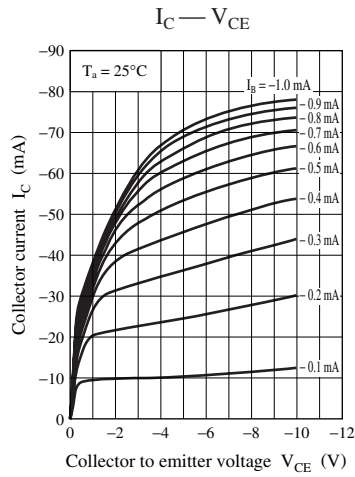
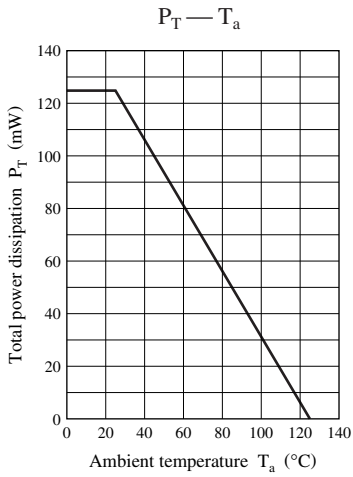
Note) *: Ratio between one and another



Marking Symbol: 1P

Internal Connection





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