

NP0A456

Silicon PNP epitaxial planar type

For High speed switching

■ Features

- Suitable for high-density mounting and downsizing of the equipment
- Automatic insertion with the taping is possible

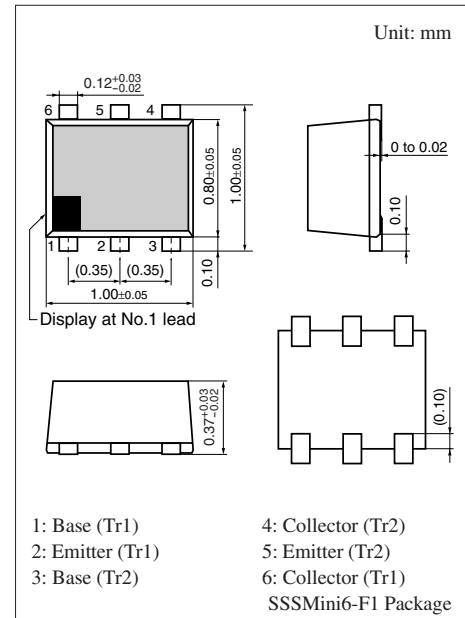
■ Basic Part Number

- 2SA2082 × 2

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

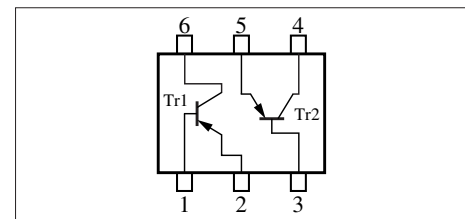
Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V_{CBO}	-15	V
Collector-emitter voltage (Base open)	V_{CEO}	-15	V
Emitter-base voltage (Collector open)	V_{EBO}	-4	V
Collector current	I_{C}	-50	mA
Peak collector current	I_{CP}	-100	mA
Total power dissipation *	P_{T}	125	mW
Junction 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



Marking Symbol: 3E

Internal Connection

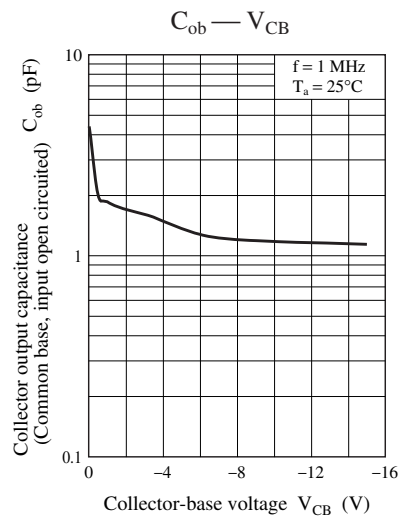
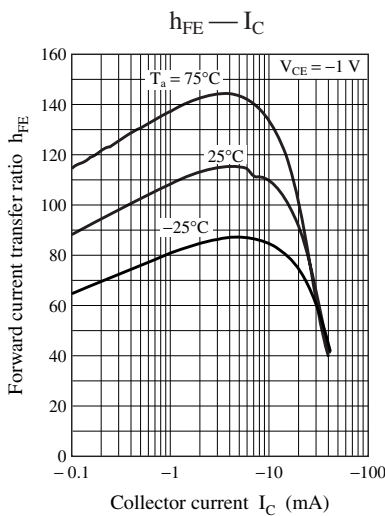
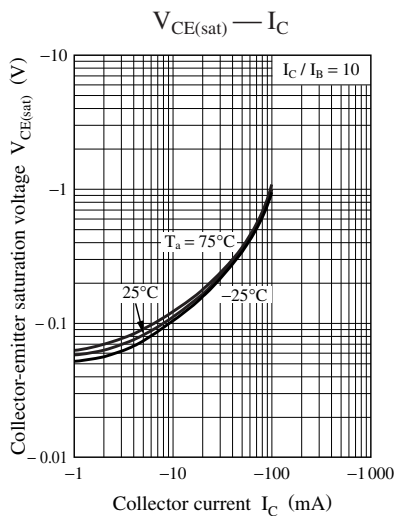
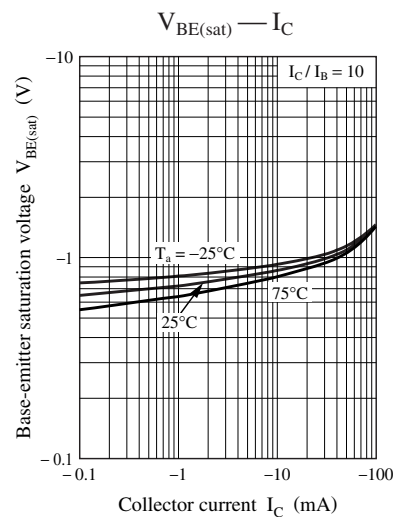
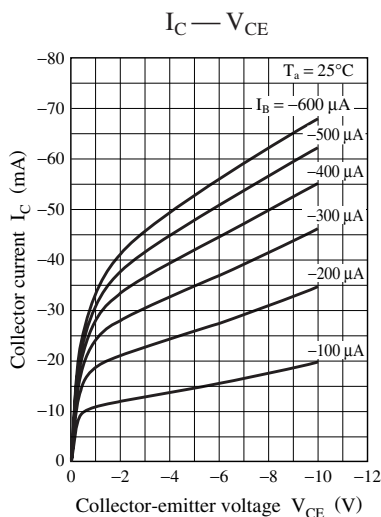
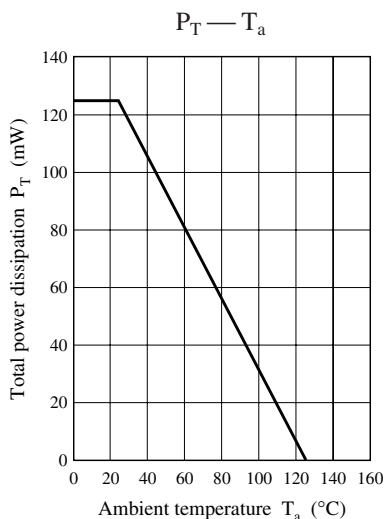
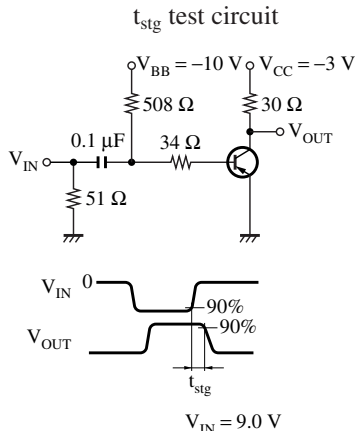
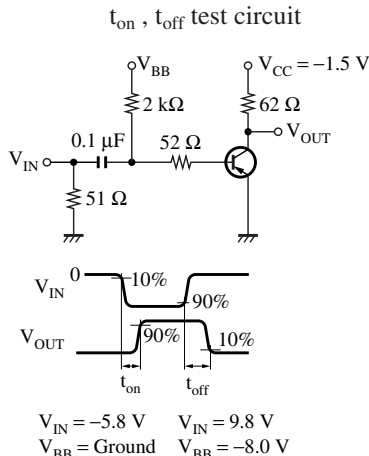


■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{\text{CB}} = -8 \text{ V}, I_{\text{E}} = 0$			-0.1	μA
Emitter-base cutoff current (Collector open)	I_{EBO}	$V_{\text{EB}} = -3 \text{ V}, I_{\text{C}} = 0$			-0.1	μA
Forward current transfer ratio	h_{FE1}	$V_{\text{CE}} = -1 \text{ V}, I_{\text{C}} = -10 \text{ mA}$	50		150	—
	h_{FE2}	$V_{\text{CE}} = -1 \text{ V}, I_{\text{C}} = -1 \text{ mA}$	30			
Collector-emitter saturation voltage	$V_{\text{CE(sat)}}$	$I_{\text{C}} = -10 \text{ mA}, I_{\text{B}} = -1 \text{ mA}$		-0.1	-0.2	V
Transition frequency	f_{T}	$V_{\text{CB}} = -10 \text{ V}, I_{\text{E}} = 10 \text{ mA}, f = 200 \text{ MHz}$	800	1500		MHz
Collector output capacitance (Common base, input open circuited)	C_{ob}	$V_{\text{CB}} = -5 \text{ V}, I_{\text{E}} = 0, f = 1 \text{ MHz}$		1		pF
Turn-on time	t_{on}	Refer to the switching time measurement circuit		12		ns
Turn-off time	t_{off}			20		ns
Storage time	t_{stg}			19		ns

Note) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

Switching time measurement circuit



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