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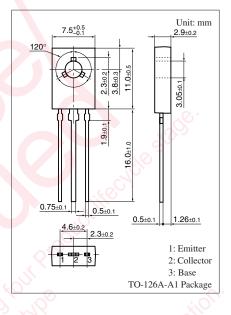
Silicon NPN epitaxial planar type

For low-frequency power amplification/ stroboscope/converter

Features

- \bullet Low collector-emitter saturation voltage $V_{\mbox{CE(sat)}}$
- Satisfactory operation performances and high efficiency with a low-voltage power supply

Absolute Maximum Ratings $T_a = 25^{\circ}C$							
Parameter	Symbol	Rating	Unit				
Collector-base voltage (Emitter open)	V _{CBO}	40	V				
Collector-emitter voltage (Base open)	V _{CEO}	20	V				
Emitter-base voltage (Collector open)	V _{EBO}	7	V				
Collector current	I _C	5	А				
Peak collector current	I _{CP}	8	А				
Collector power dissipation *	P _C	10	W				
Junction temperature	Tj	150	°C				
Storage temperature	T _{stg}	-55 to +150	°C				
			XO.				



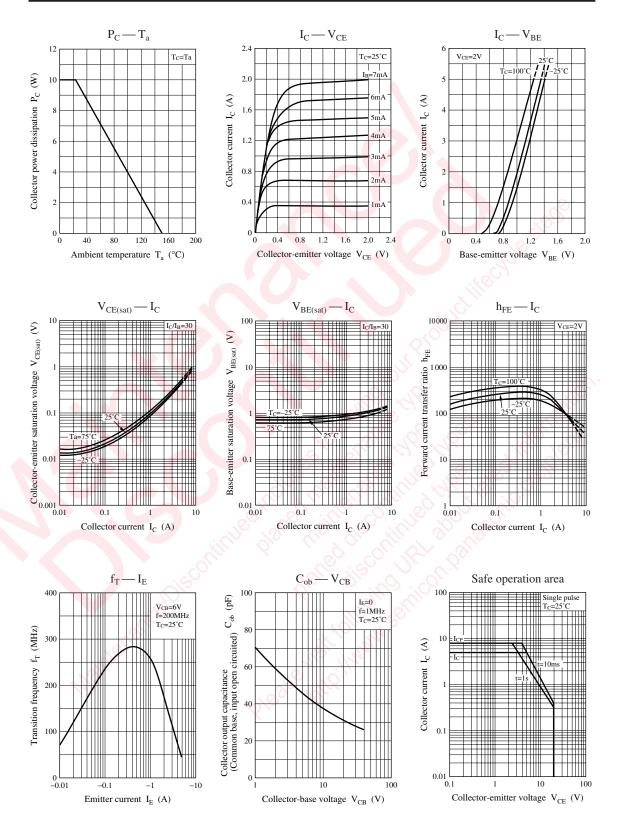
Note) *: $T_a = T_C$

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

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-emitter voltage (Base open)	V _{CEO}	$I_{\rm C} = 1 \text{ mA}, I_{\rm B} = 0$	20	S		V
Emitter-base voltage (Collector open)	V _{EBO}	$I_{\rm E} = 10 \ \mu A, I_{\rm C} = 0$	7	0		V
Collector-base cutoff current (Emitter open)	I _{CBO}	$V_{CB} = 10 \text{ V}, I_E = 0$	2.2		0.1	μΑ
Emitter-base cutoff current (Collector open)	I _{EBO}	$V_{EB} = 7 V, I_C = 0$			0.1	μΑ
Forward current transfer ratio *	h _{FE1}	$V_{CE} = 2 V, I_C = 0.5 A$	140		450	
	h _{FE2}	$V_{CE} = 2 V, I_C = 1 A$	70			
Collector-emitter saturation voltage *	V _{CE(sat)}	$I_{\rm C} = 3 {\rm A}, I_{\rm B} = 0.1 {\rm A}$			1	V
Transition frequency	f _T	$V_{CB} = 6 \text{ V}, I_E = -50 \text{ mA}, f = 200 \text{ MHz}$		150		MHz
Collector output capacitance	C _{ob}	$V_{CB} = 20 \text{ V}, I_E = 0, f = 1 \text{ MHz}$			50	pF
(Common base, input open circuited)		as the				

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors. 2. *: Pulse measurement

Panasonic



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