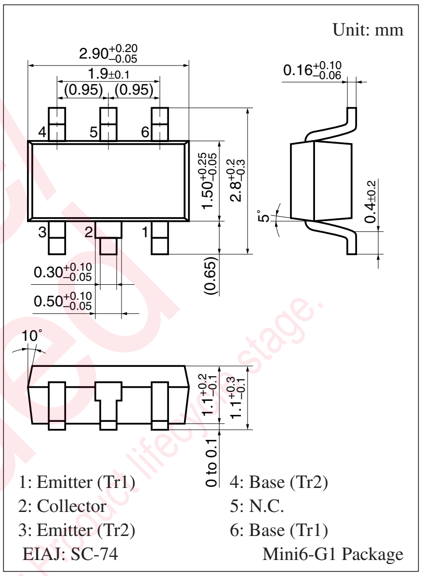
Panasonic

XN0F256

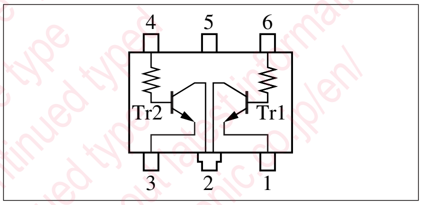
Silicon NPN epitaxial planar type

For muting



Marking Symbol: 6A

Internal Connection



■ Features

- Two elements incorporated into one package (Collector-coupled transistors with built-in resistor)
- Low collector-emitter saturation voltage $V_{CE(sat)}$
- Reduction of the mounting area and assembly cost by one half

■ Absolute Maximum Ratings $T_a = 25°C$

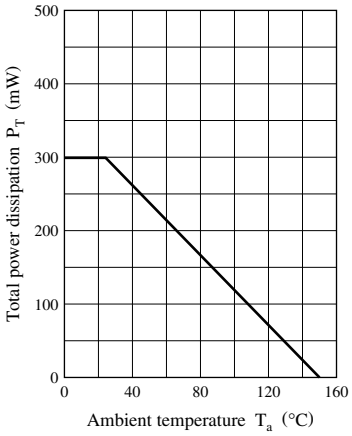
Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V_{CBO}	30	V
Collector-emitter voltage (Base open)	V_{CEO}	20	V
Emitter-base voltage (Collector open)	V_{EBO}	5	V
Collector current	I_C	600	mA
Total power dissipation	P_T	300	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	−55 to +150	°C

■ Electrical Characteristics $T_a = 25°C \pm 3°C$

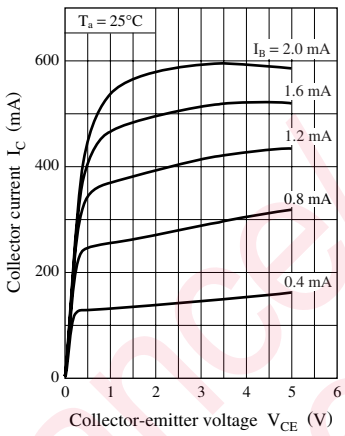
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_C = 1\ \mu A$, $I_E = 0$	30			V
Collector-emitter voltage (Base open)	V_{CEO}	$I_C = 1$ mA, $I_B = 0$	20			V
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = 1\ \mu A$, $I_C = 0$	5			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = 30$ V, $I_E = 0$			1	µA
Emitter-base cutoff current (Collector open)	I_{EBO}	$V_{EB} = 5$ V, $I_C = 0$			1	µA
Forward current transfer ratio	h_{FE}	$V_{CE} = 5$ V, $I_C = 50$ mA	100		600	—
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 50$ mA, $I_B = 2.5$ mA			80	mV
Input resistance	R_1		−30%	4.7	+30%	kΩ
Transition frequency	f_T	$V_{CB} = 10$ V, $I_E = −50$ mA, f = 200 MHz		200		MHz

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

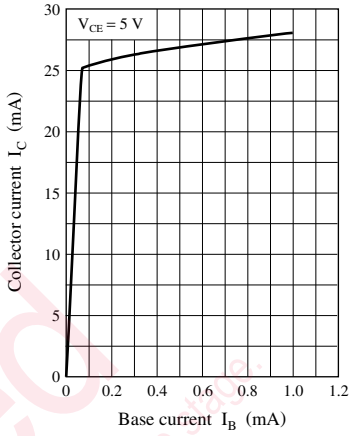
P_T — T_a



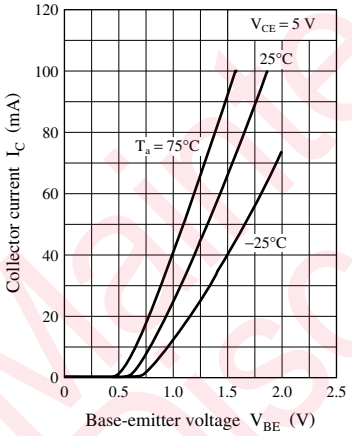
I_C — V_{CE}



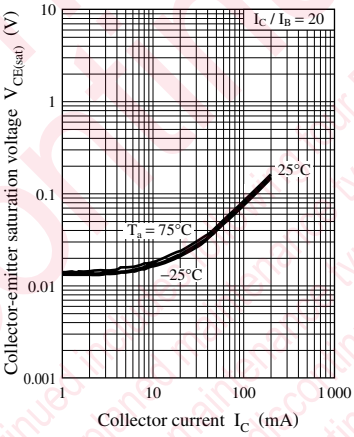
I_C — I_B



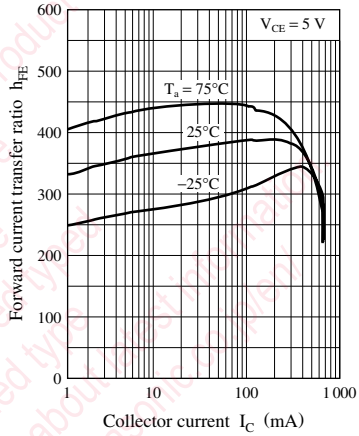
I_C — V_{BE}



$V_{CE(sat)}$ — I_C



h_{FE} — I_C



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