TOSHIBA Transistor Silicon NPN Epitaxial Type (PCT process)

2SC2459

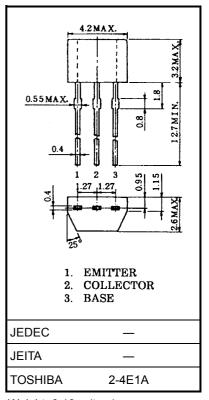
Audio Amplifier Applications

Unit: mm

- High breakdown voltage: $V_{CEO} = 120 \text{ V (max)}$
- High DC current gain: $h_{FE} = 200 \sim 700$
- Excellent hFE linearity: hFE (IC = 0.1 mA)/hFE (IC = 2 mA) = 0.95 (typ.)
- Low noise: NF = 1dB (typ.), 10dB (max)
- Complementary to 2SA1049.
- Small package.

Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	120	V
Collector-emitter voltage	V_{CEO}	120	V
Emitter-base voltage	V _{EBO}	5	V
Collector current	IC	100	mA
Base current	ΙΒ	20	mA
Collector power dissipation	P _C	200	mW
Junction temperature	Tj	125	°C
Storage temperature range	T _{stg}	−55~125	°C



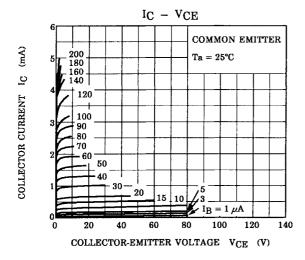
Weight: 0.13 g (typ.)

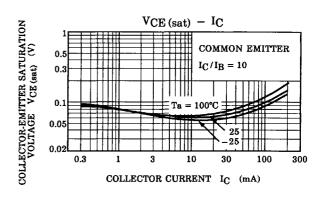
Electrical Characteristics (Ta = 25°C)

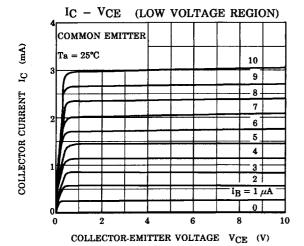
Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current	I _{CBO}	V _{CB} = 120 V, I _E = 0	_	_	0.1	μΑ
Emitter cut-off current	I _{EBO}	V _{EB} = 5 V, I _C = 0	_	_	0.1	μΑ
DC current gain	h _{FE} (Note)	$V_{CE} = 6 \text{ V}, I_C = 2 \text{ mA}$	200	_	700	
Collector-emitter saturation voltage	V _{CE (sat)}	I _C = 10 mA, I _B = 1 mA	_	_	0.3	V
Transition frequency	f _T	V _{CE} = 6 V, I _C = 1 mA	_	100	_	MHz
Collector output capacitance	C _{ob}	V _{CB} = 10 V, I _E = 0, f = 1 MHz	_	3.0	_	pF
Noise figure	NF	V_{CE} = 6 V, I_{C} = 0.1 mA, f = 1 kHz, R_{G} = 10 k Ω	_	1.0	10	dB

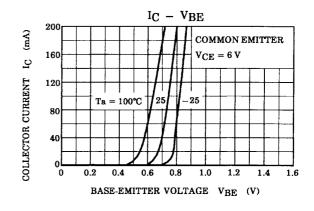
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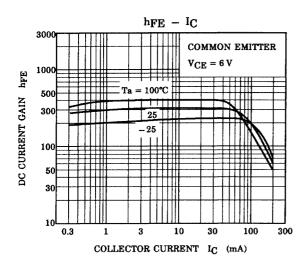
Note: hFE classification GR: 200~400, BL: 350~700

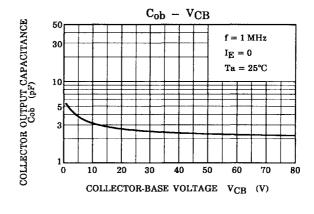


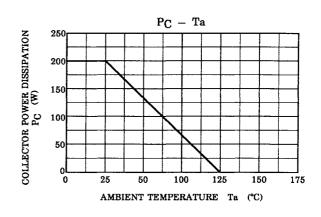












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