Unit: mm

TOSHIBA Transistor Silicon NPN Epitaxial Type (PCT Process)

# 2SC6026

## General-Purpose Amplifier Applications

• High voltage and high current

:  $V_{CEO} = 50 \text{ V}$ ,  $I_{C} = 100 \text{ mA (max)}$ 

• Excellent h<sub>FE</sub> linearity: h<sub>FE</sub> ( $I_C = 0.1 \text{ mA}$ )/h<sub>FE</sub> ( $I_C = 2 \text{ mA}$ ) = 0.95 (typ.)

• High h<sub>FE</sub> : h<sub>FE</sub> = 120~400

Complementary to 2SA2154

• Lead (Pb) free

## Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit
Collector-base voltage	$V_{CBO}$	60	V
Collector-emitter voltage	V <sub>CEO</sub>	50	V
Emitter-base voltage	V <sub>EBO</sub>	5	V
Collector current	I <sub>C</sub>	100	mA
Base current	Ι <sub>Β</sub>	30	mA
Collector power dissipation	PC	50	mW
Junction temperature	Tj	150	°C
Storage temperature range	T <sub>stg</sub>	-55~150	°C

2 0.8±0.05 0.1±0.05

1.BASE
2.EMITTER
3.COLLECTOR

JEDEC —

JEITA —

2-1E1A

Weight: 0.0006 g (typ.)

**TOSHIBA** 

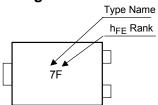
## **Electrical Characteristics (Ta = 25°C)**

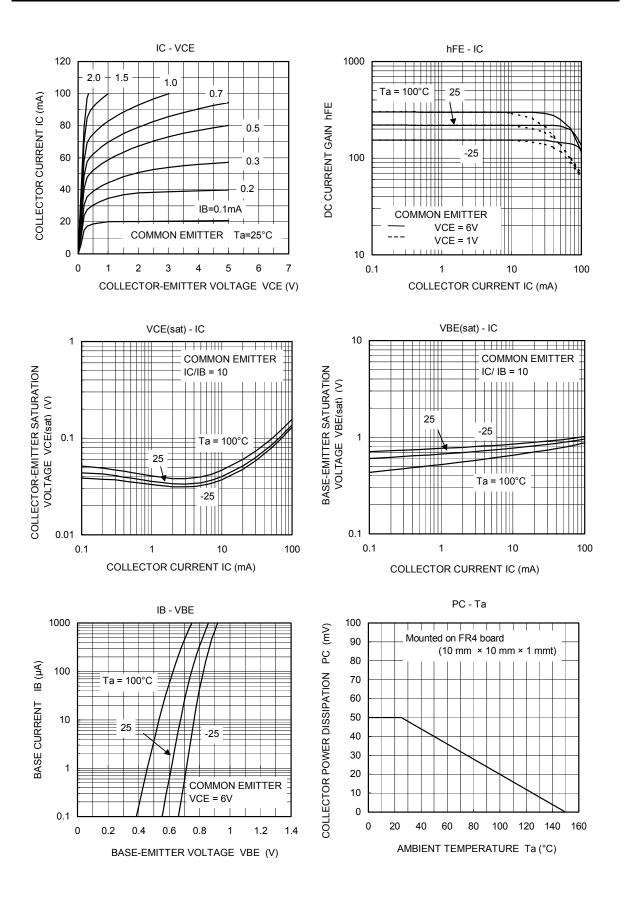
Characteristic	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cutoff current	I <sub>CBO</sub>	$V_{CB} = 60 \text{ V}, I_{E} = 0$	_	_	0.1	μΑ
Emitter cutoff current	I <sub>EBO</sub>	V <sub>EB</sub> = 5 V, I <sub>C</sub> = 0	_	_	0.1	μА
DC current gain	h <sub>FE</sub> (Note)	$V_{CE} = 6 \text{ V}, I_{C} = 2 \text{ mA}$	120	_	400	_
Collector-emitter saturation voltage	V <sub>CE (sat)</sub>	$I_C = 100 \text{ mA}, I_B = 10 \text{ mA}$	_	0.1	0.25	V
Transition frequency	f <sub>T</sub>	$V_{CE} = 10 \text{ V}, I_{C} = 1 \text{ mA}$	60		_	MHz
Collector output capacitance	C <sub>ob</sub>	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$	_	0.95	_	pF

Note: hFE classification Y (F): 120~240, GR (H): 200~400

( ) marking symbol

## Marking





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