

TOSHIBA Transistor Silicon PNP Epitaxial Type (PCT Process)

HN1A26FS

Frequency General-Purpose Amplifier Applications

- Two devices are incorporated into a fine-pitch, small-mold (6-pin) package.
- High voltage: $V_{CEO} = -50$ V
- High current: $I_C = -100$ mA (max)
- High h_{FE} : $h_{FE} = 120$ to 400
- Excellent h_{FE} linearity
: $h_{FE} (I_C = -0.1 \text{ mA})/h_{FE} (I_C = -2 \text{ mA}) = 0.95$ (typ.)

Absolute Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-50	V
Collector-emitter voltage	V_{CEO}	-50	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-100	mA
Base current	I_B	-30	mA
Collector power dissipation	P_C (Note 1)	50	mW
Junction temperature	T_j	150	°C
Storage temperature range	T_{stg}	-55 to 150	°C

Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings.

Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/"Derating Concept and Methods") and individual reliability data (i.e. reliability test report and estimated failure rate, etc).

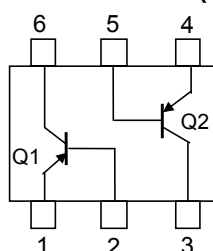
Note 1: Total rating.

Electrical Characteristics (Ta = 25°C)

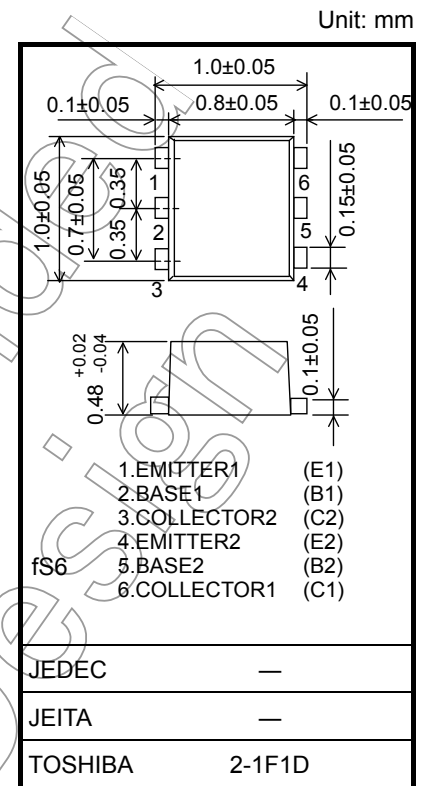
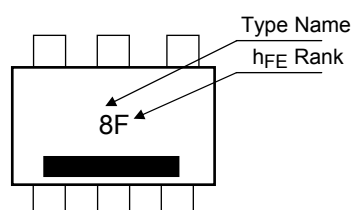
Characteristic	Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = -50$ V, $I_E = 0$	—	—	-0.1	μ A
Emitter cutoff current	I_{EBO}	$V_{EB} = -5$ V, $I_C = 0$	—	—	-0.1	μ A
DC current gain	h_{FE} (Note)	$V_{CE} = -6$ V, $I_C = -2$ mA	120	—	400	—
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100$ mA, $I_B = -10$ mA	—	-0.18	-0.3	V
Transition frequency	f_T	$V_{CE} = -10$ V, $I_C = -1$ mA	80	—	—	MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10$ V, $I_E = 0$, $f = 1$ MHz	—	1.6	—	pF

Note: h_{FE} Classification Y (F): 120 to 140, GR (H): 200 to 400
() Marking symbol

Equivalent Circuit (top view)

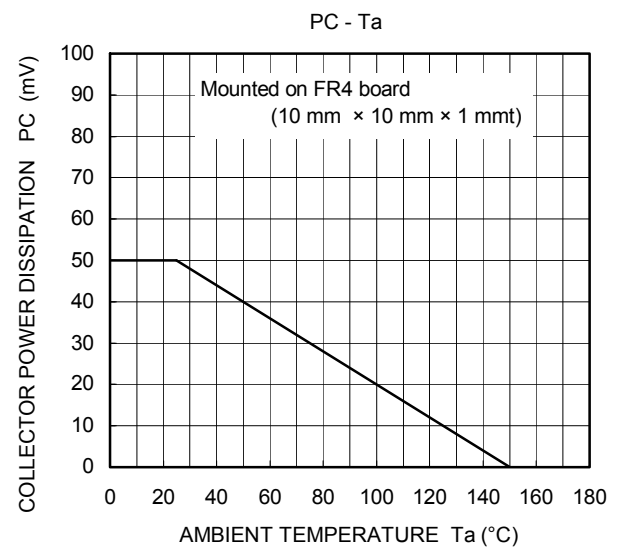
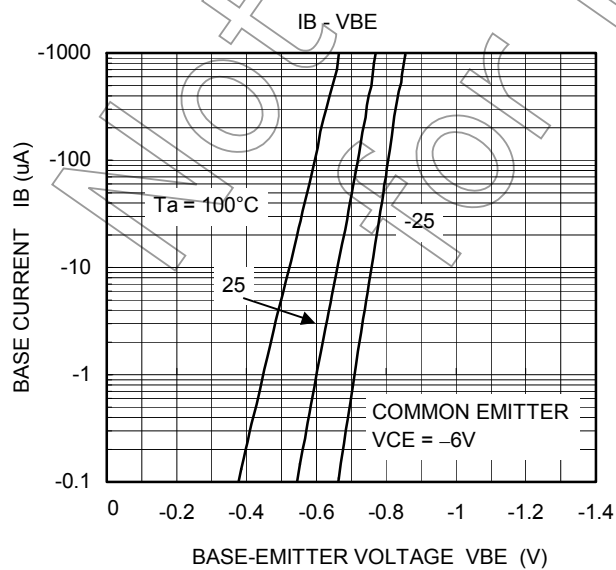
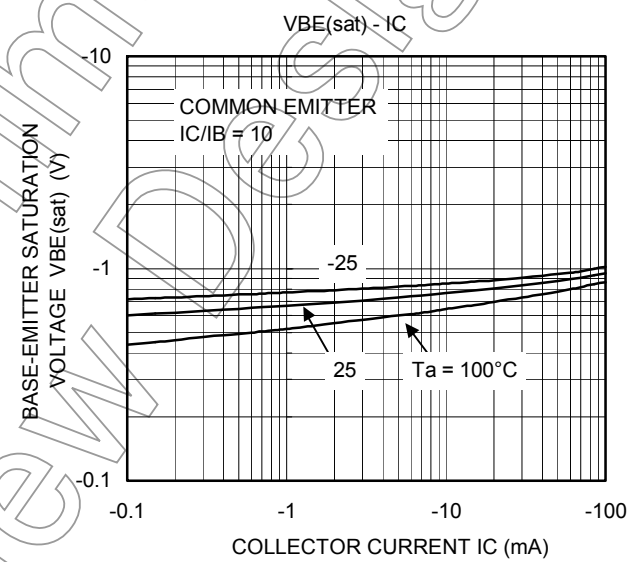
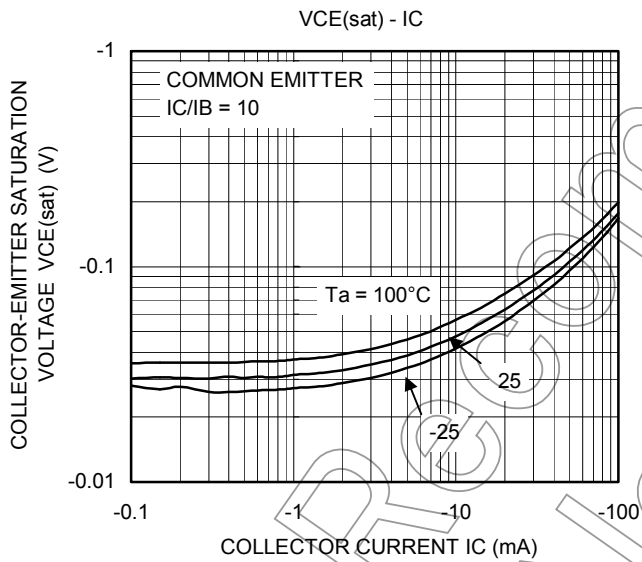
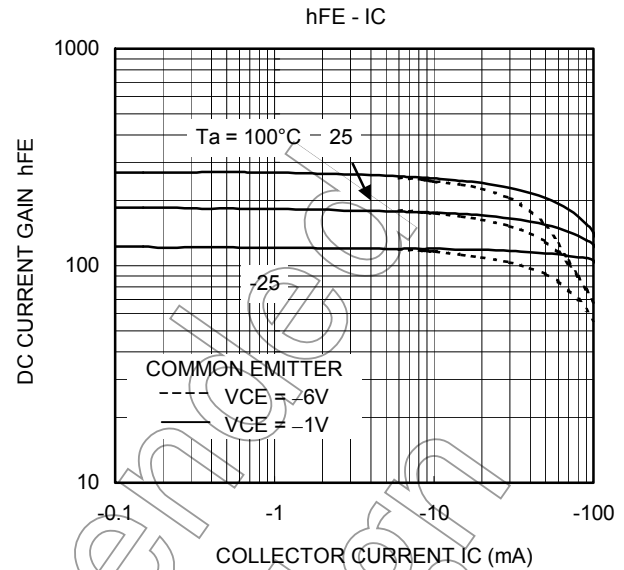
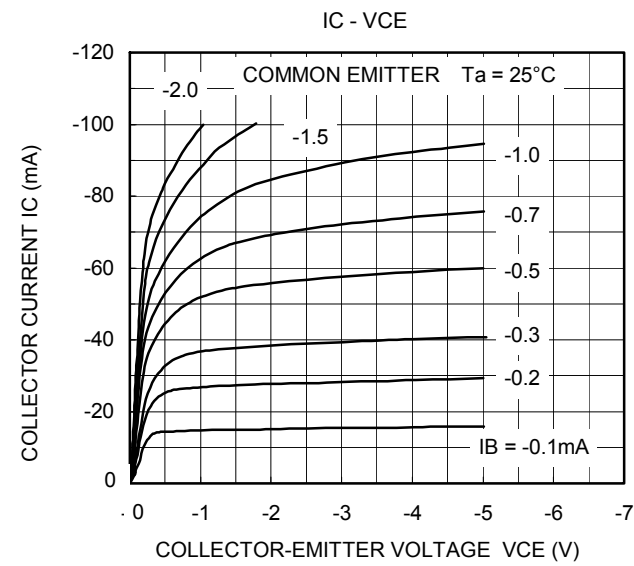


Marking



Weight: 0.001g (typ.)

Q1, Q2 Common



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