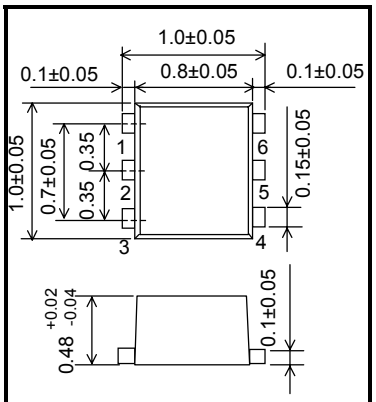
TOSHIBA Transistor Silicon PNP Epitaxial Type (PCT Process)

# HN2A26FS

## 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 mA)/$h_{FE}$ ($I_C$ = −2 mA) = 0.95 (typ.)
- Lead (Pb) - free

Unit: mm




1. EMITTER1 (E1)
2. EMITTER2 (E2)
3. BASE2 (B2)
4. COLLECTOR2 (C2)
5. BASE1 (B1)
6. COLLECTOR1 (C1)

fS6

| | |
|---|---|
| JEDEC | — |
| JEITA | — |
| TOSHIBA | 2-1F1C |

Weight: 0.001 g (typ.)

### 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 | mW |
| Collector power dissipation | $P_C$(Note) | 50 | mW |
| Junction temperature | $T_j$ | 150 | °C |
| Storage temperature range | $T_{stg}$ | −55 ~ 150 | °C |

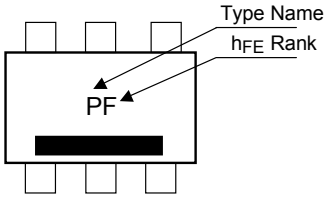
Note: Total rating.

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

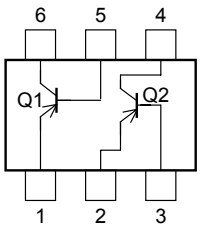
| Characteristic | Symbol | Test Condition | Min | Typ. | Max | Unit |
|---|---|---|---|---|---|---|
| Collector cutoff current | $I_{CBO}$ | $V_{CB}$ = −50 V, $I_E$ = 0 | — | — | −0.1 | μA |
| Emitter cutoff current | $I_{EBO}$ | $V_{EB}$ = −5 V, $I_C$ = 0 | — | — | −0.1 | μA |
| DC current gain | $h_{FE}$(Note) | $V_{CE}$ = −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 ~ 140, GR (H): 200 ~ 400
( ) Marking symbol

### Marking

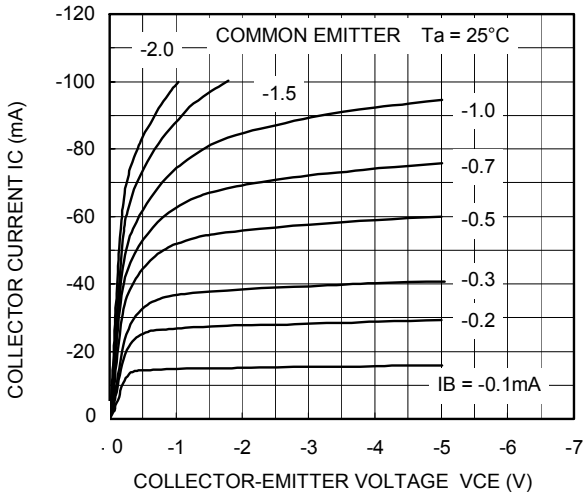



### Equivalent Circuit (top view)

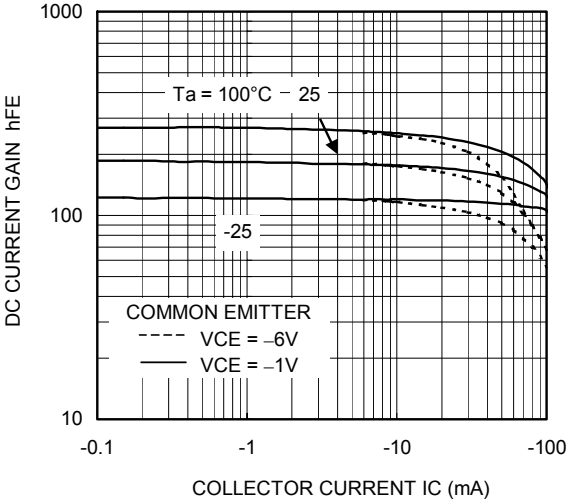


## Q1, Q2 Common

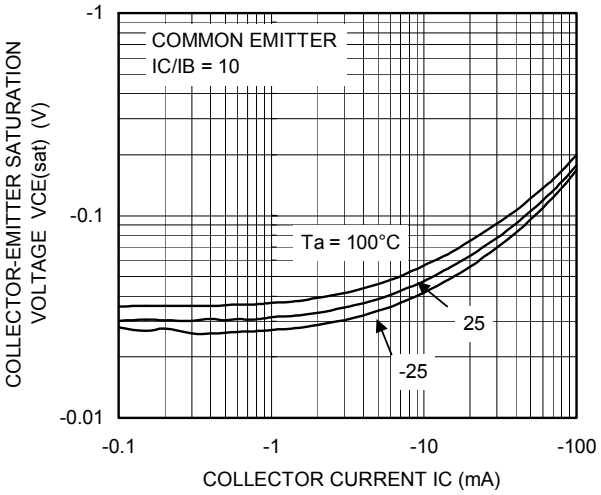
IC - VCE



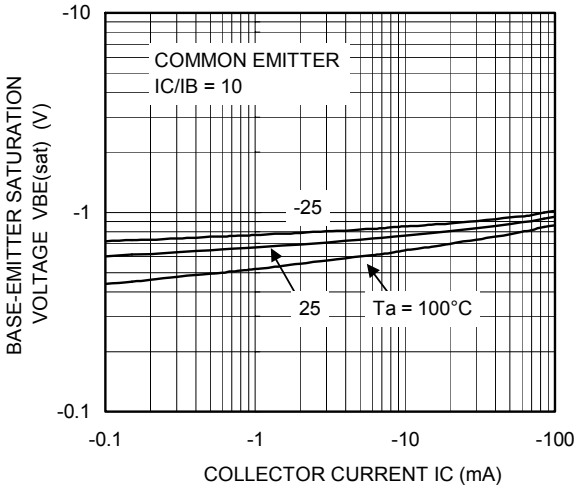

hFE - IC



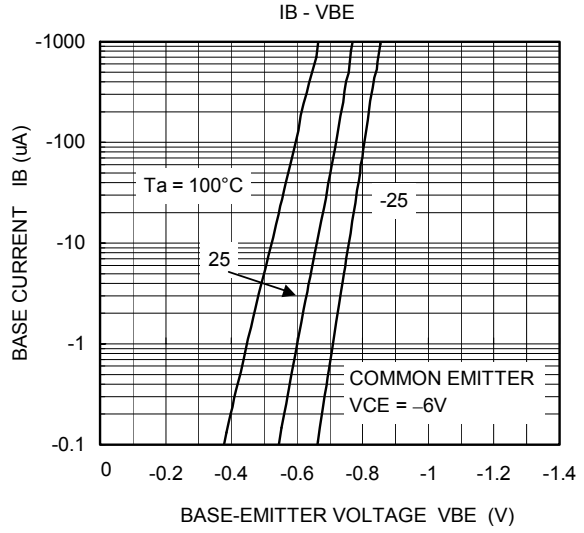

VCE(sat) - IC



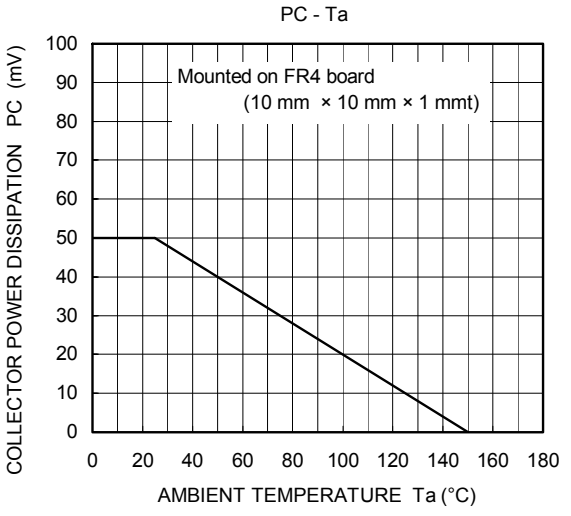

VBE(sat) - IC




IB - VBE




PC - Ta




*:Total rating.

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