

# 2SC6026MFV

## General-Purpose Amplifier Applications

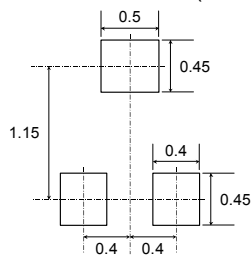
- High voltage and high current  
:  $V_{CEO} = 50\text{ V}$ ,  $I_C = 150\text{ mA}$  (max)
- Excellent  $h_{FE}$  linearity :  
 $h_{FE} (I_C = 0.1\text{ mA})/h_{FE} (I_C = 2\text{ mA}) = 0.95$  (typ.)
- High  $h_{FE}$  :  $h_{FE} = 120\sim 400$
- Complementary to 2SA2154MFV
- Lead (Pb) - free

## Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

| Characteristic              | Symbol    | Rating        | Unit             |
|-----------------------------|-----------|---------------|------------------|
| Collector-base voltage      | $V_{CBO}$ | 60            | V                |
| Collector-emitter voltage   | $V_{CEO}$ | 50            | V                |
| Emitter-base voltage        | $V_{EBO}$ | 5             | V                |
| Collector current           | $I_C$     | 150           | mA               |
| Base current                | $I_B$     | 30            | mA               |
| Collector power dissipation | $P_C$     | 150*          | mW               |
| Junction temperature        | $T_j$     | 150           | $^\circ\text{C}$ |
| Storage temperature range   | $T_{stg}$ | $-55\sim 150$ | $^\circ\text{C}$ |

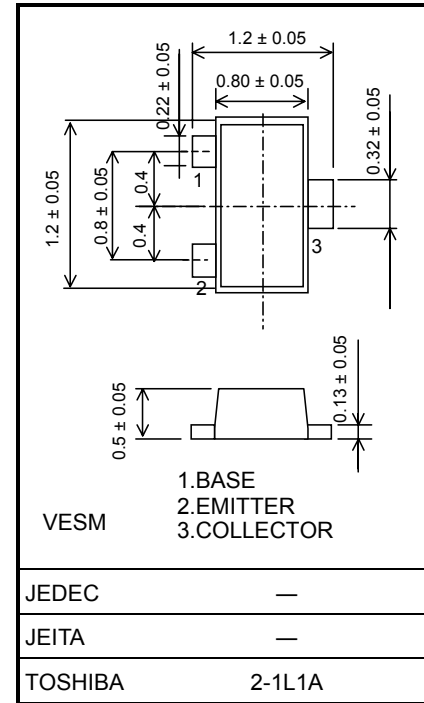
\* : Mounted on FR4 board (25.4 mm × 25.4 mm × 1.6mm)

## Mount Pad Dimensions (Reference)



Unit: mm

Unit: mm



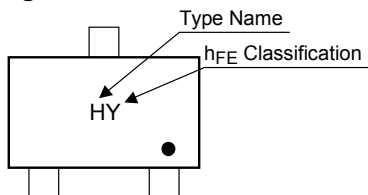
Weight: 0.0015 g (typ.)

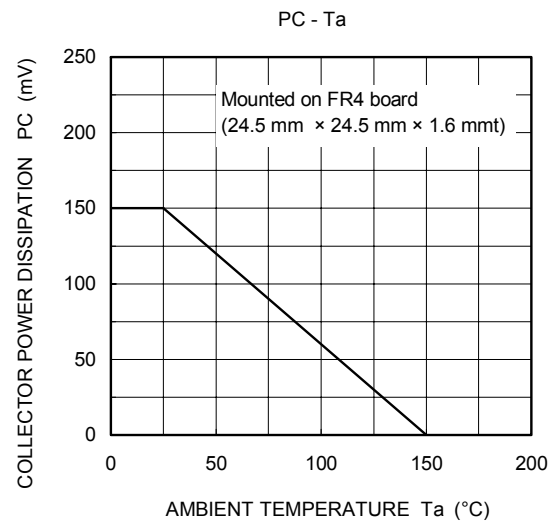
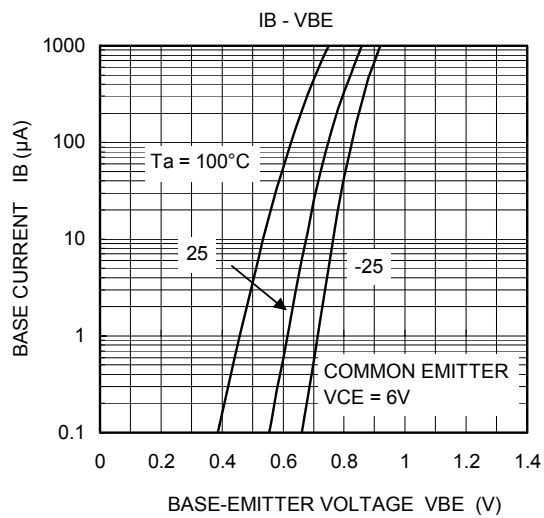
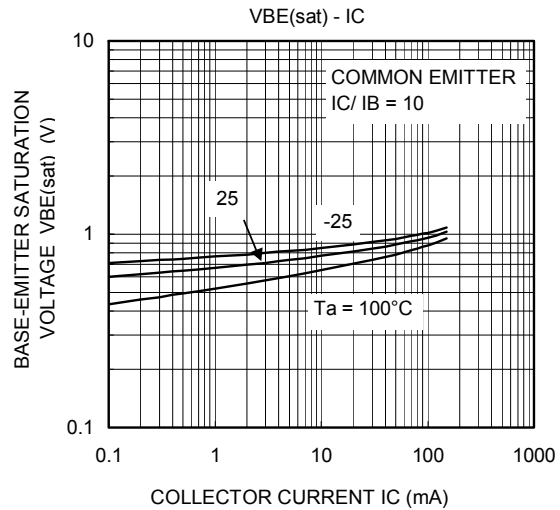
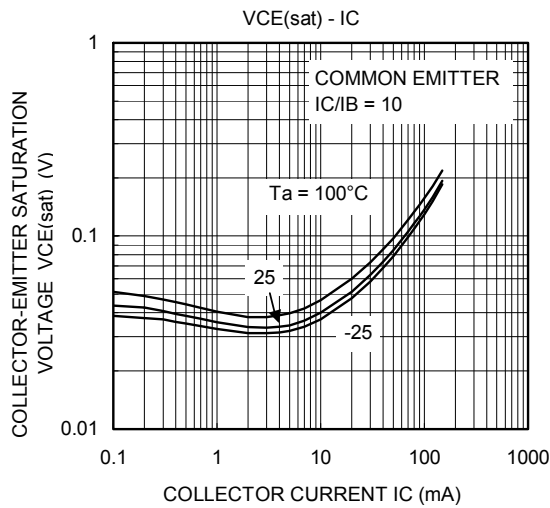
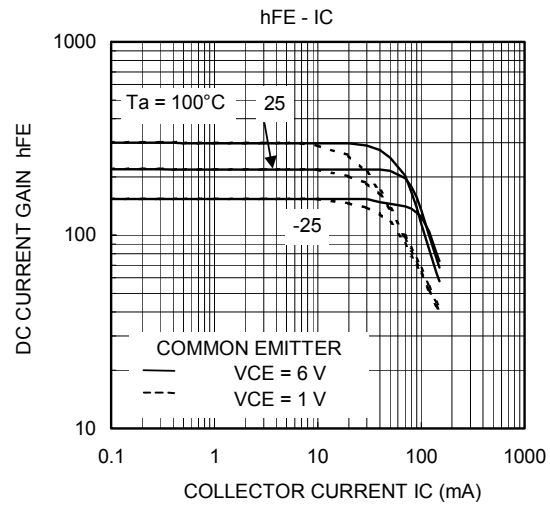
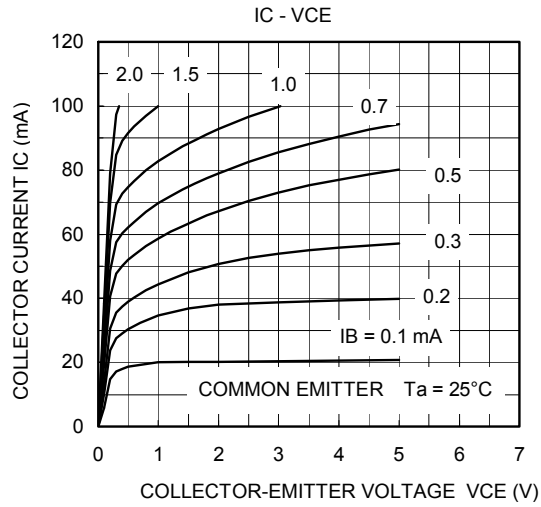
## Electrical Characteristics (Ta = 25°C)

| Characteristic                       | Symbol          | Test Condition                                    | Min | Typ. | Max  | Unit          |
|--------------------------------------|-----------------|---------------------------------------------------|-----|------|------|---------------|
| Collector cutoff current             | $I_{CBO}$       | $V_{CB} = 60\text{ V}, I_E = 0$                   | —   | —    | 0.1  | $\mu\text{A}$ |
| Emitter cutoff current               | $I_{EBO}$       | $V_{EB} = 5\text{ V}, I_C = 0$                    | —   | —    | 0.1  | $\mu\text{A}$ |
| DC current gain                      | $h_{FE}$ (Note) | $V_{CE} = 6\text{ V}, I_C = 2\text{ mA}$          | 120 | —    | 400  | —             |
| Collector-emitter saturation voltage | $V_{CE(sat)}$   | $I_C = 100\text{ mA}, I_B = 10\text{ mA}$         | —   | 0.1  | 0.25 | V             |
| Transition frequency                 | $f_T$           | $V_{CE} = 10\text{ V}, I_C = 1\text{ mA}$         | 60  | —    | —    | MHz           |
| Collector output capacitance         | $C_{ob}$        | $V_{CB} = 10\text{ V}, I_E = 0, f = 1\text{ MHz}$ | —   | 0.95 | 3    | pF            |

Note:  $h_{FE}$  classification Y (Y): 120~240, GR (G): 200~400  
( ) marking symbol

## Marking





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