

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

2SA1162

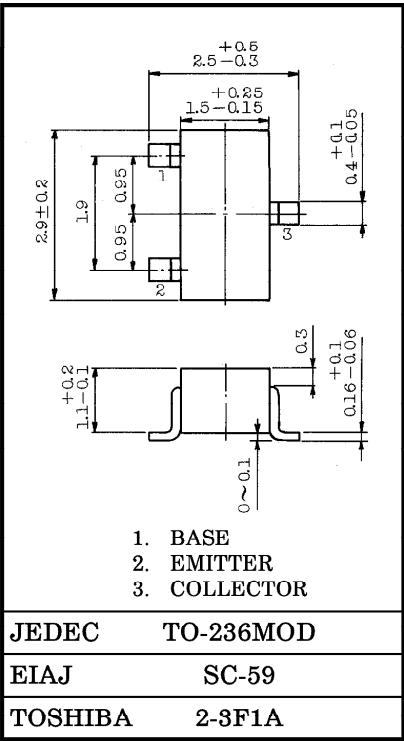
AUDIO FREQUENCY GENERAL PURPOSE AMPLIFIER APPLICATIONS.

Unit in mm

- High Voltage and High Current
: $V_{CEO} = -50V$, $I_C = -150mA$ (Max.)
- Excellent h_{FE} Linearity
: $h_{FE}(I_C = -0.1mA) / h_{FE}(I_C = -2mA) = 0.95$ (Typ.)
- High h_{FE} : $h_{FE} = 70 \sim 400$
- Low Noise : $NF = 1dB$ (Typ.), $10dB$ (Max.)
- Complementary to 2SC2712
- Small Package

MAXIMUM RATINGS ($T_a = 25^{\circ}C$)

| 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 | -150 | mA |
| Base Current | I_B | -30 | mA |
| Collector Power Dissipation | P_C | 150 | mW |
| Junction Temperature | T_j | 125 | $^{\circ}C$ |
| Storage Temperature Range | T_{stg} | -55~125 | $^{\circ}C$ |

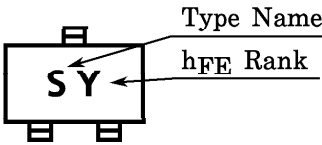


ELECTRICAL CHARACTERISTICS ($T_a = 25^{\circ}C$)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|-----------------------|--------------------------------------------------------------------|------|------|------|---------|
| Collector Cut-off Current | I_{CBO} | $V_{CB} = -50V$, $I_E = 0$ | — | — | -0.1 | μA |
| Emitter Cut-off Current | I_{EBO} | $V_{EB} = -5V$, $I_C = 0$ | — | — | -0.1 | μA |
| DC Current Gain | $h_{FE}(\text{Note})$ | $V_{CE} = -6V$, $I_C = -2mA$ | 70 | — | 400 | |
| Collector-Emitter Saturation Voltage | $V_{CE}(\text{sat})$ | $I_C = -100mA$, $I_B = -10mA$ | — | -0.1 | -0.3 | V |
| Transition Frequency | f_T | $V_{CE} = -10V$, $I_C = -1mA$ | 80 | — | — | MHz |
| Collector Output Capacitance | C_{ob} | $V_{CB} = -10V$, $I_E = 0$, $f = 1MHz$ | — | 4 | 7 | pF |
| Noise Figure | NF | $V_{CE} = -6V$, $I_C = 0.1mA$, $f = 1kHz$, $R_g = 10k\Omega$ | — | 1.0 | 10 | dB |

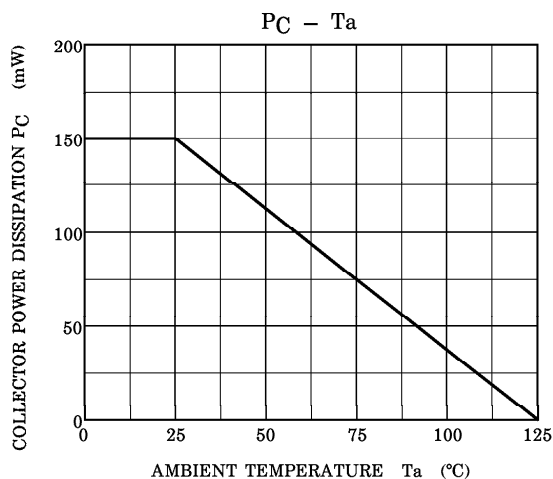
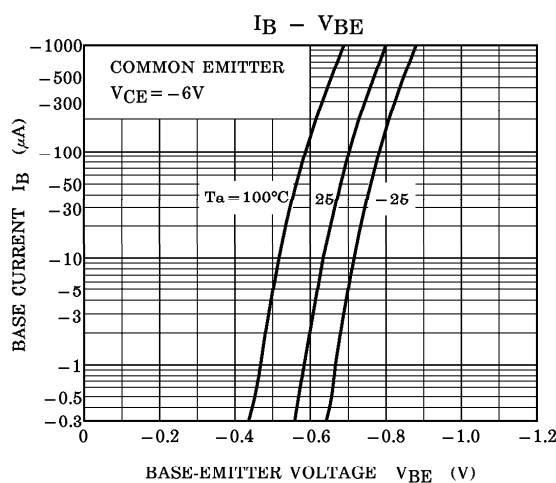
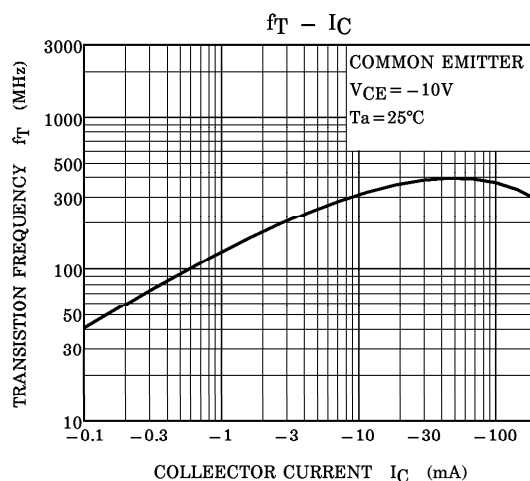
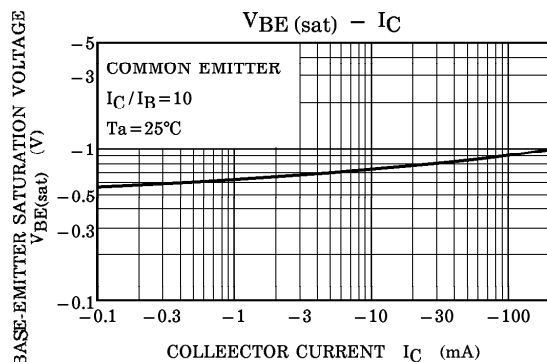
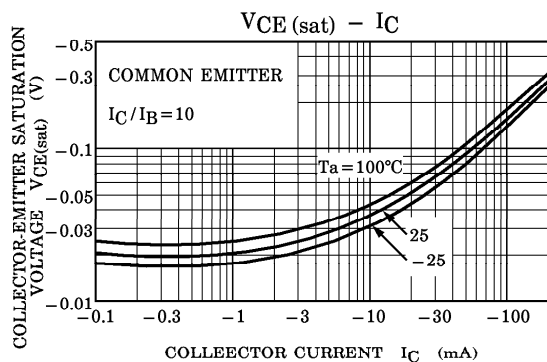
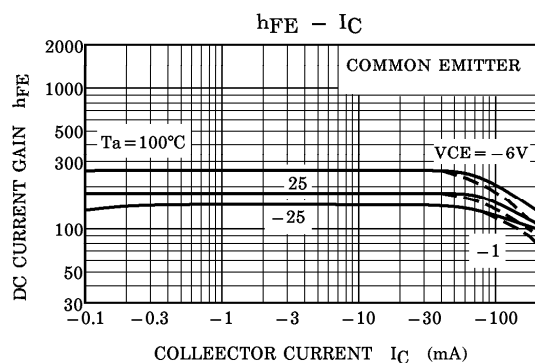
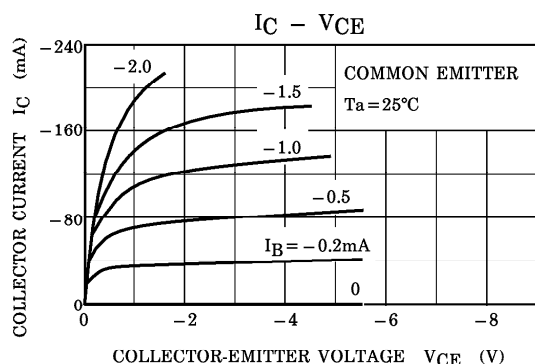
Note : h_{FE} Classification O(O): 70~140, Y(Y): 120~240,
GR(G): 200~400 () Marking Symbol

MARKING



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