

TOSHIBA TRANSISTOR SILICON PNP TRIPLE DIFFUSED TYPE

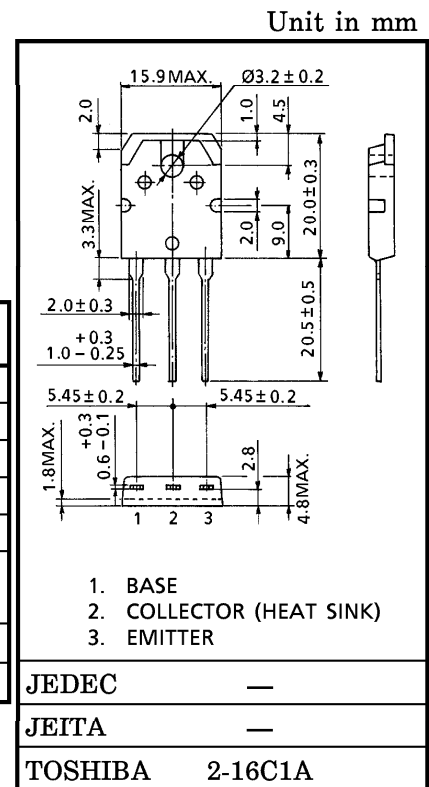
2SA1940

POWER AMPLIFIER APPLICATIONS

- Complementary to 2SC5197
- Recommend for 55W High Fidelity Audio Frequency Amplifier Output Stage.

MAXIMUM RATINGS (T_c = 25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---|------------------|---------|------|
| Collector-Base Voltage | V _{CB0} | -120 | V |
| Collector-Emitter Voltage | V _{CEO} | -120 | V |
| Emitter-Base Voltage | V _{EB0} | -5 | V |
| Collector Current | I _C | -8 | A |
| Base Current | I _B | -0.8 | A |
| Collector Power Dissipation (T _c = 25°C) | P _C | 80 | W |
| Junction Temperature | T _j | 150 | °C |
| Storage Temperature Range | T _{stg} | -55~150 | °C |

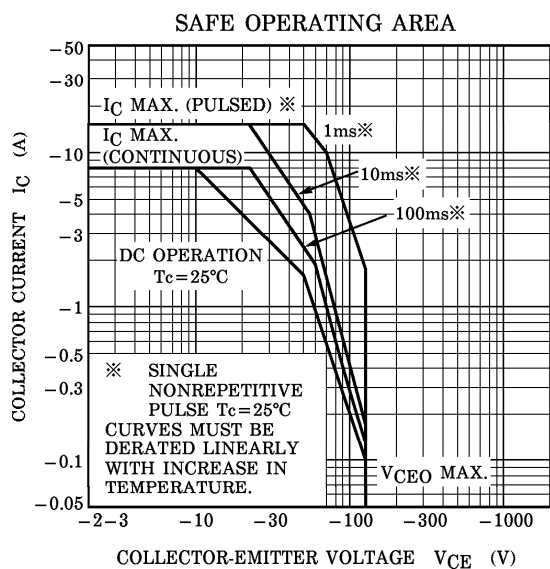
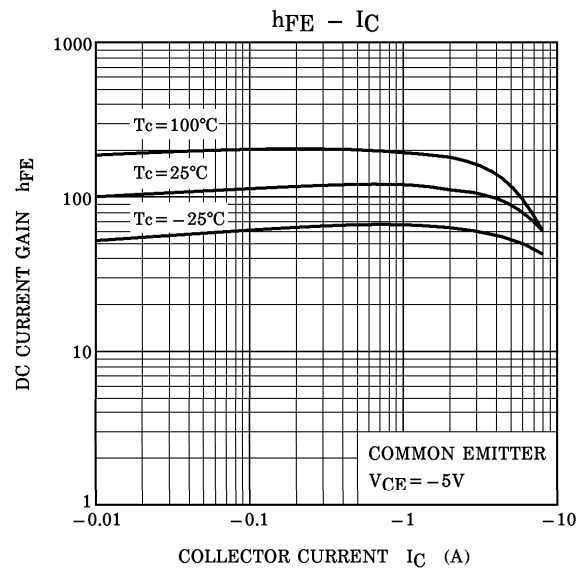
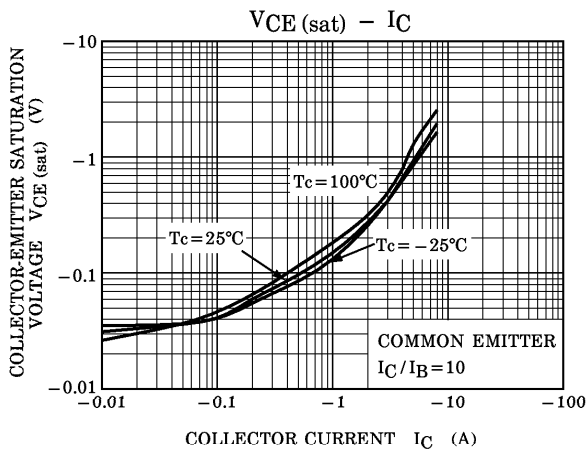
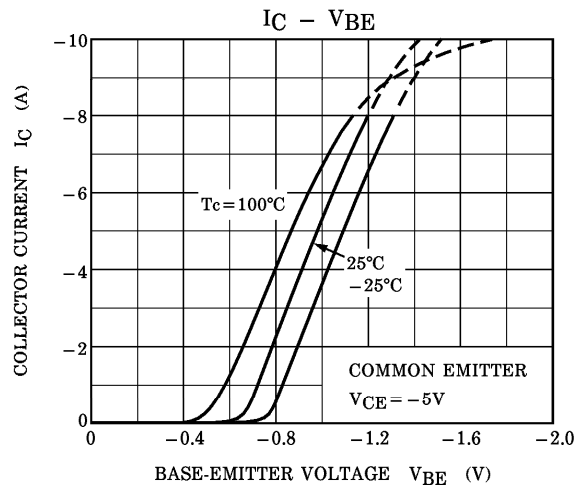
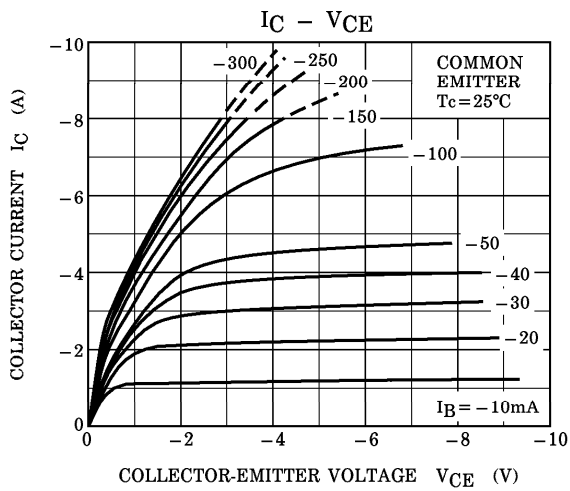


ELECTRICAL CHARACTERISTICS (T_c = 25°C)

Weight : 4.7g (Typ.)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|-------------------------------|--|------|-------|------|------|
| Collector Cut-off Current | I _{CBO} | V _{CB} = -120V, I _E = 0 | — | — | -5.0 | μA |
| Emitter Cut-off Current | I _{EB0} | V _{EB} = -5V, I _C = 0 | — | — | -5.0 | μA |
| Collector-Emitter Breakdown Voltage | V _{(BR) CEO} | I _C = -50mA, I _B = 0 | -120 | — | — | V |
| DC Current Gain | h _{FE} (1) (Note) | V _{CE} = -5V, I _C = -1A | 55 | — | 160 | |
| | h _{FE} (2) | V _{CE} = -5V, I _C = -4A | 35 | 75 | — | |
| Collector-Emitter Saturation Voltage | V _{CE (sat)} | I _C = -6A, I _B = -0.6A | — | -0.80 | -2.0 | V |
| Base-Emitter Voltage | V _{BE} | V _{CE} = -5V, I _C = -4A | — | -0.97 | -1.5 | V |
| Transition Frequency | f _T | V _{CE} = -5V, I _C = -1A | — | 30 | — | MHz |
| Collector Output Capacitance | C _{ob} | V _{CB} = -10V, I _E = 0, f = 1MHz | — | 260 | — | pF |

(Note) : h_{FE} (1) Classification R : 55~110, O : 80~160



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