TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

2 S C 5 3 5 8

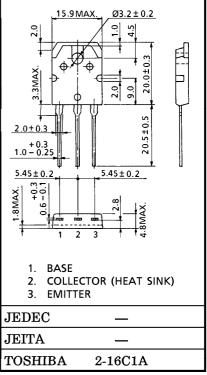
POWER AMPLIFIER APPLICATIONS

- Complementary to 2SA1986
- Recommend for 80W High Fidelity Audio Frequency Amplifier Output Stage.

MAXIMUM RATINGS (Tc = 25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---------------------------------------|--------------------|---------|------|
| Collector-Base Voltage | v_{CBO} | 230 | V |
| Collector-Emitter Voltage | v_{CEO} | 230 | V |
| Emitter-Base Voltage | $v_{ m EBO}$ | 5 | V |
| Collector Current | IC | 15 | A |
| Base Current | $I_{\mathbf{B}}$ | 1.5 | A |
| Collector Power Dissipation (Tc=25°C) | PC | 150 | W |
| Junction Temperature | $T_{\rm j}$ | 150 | °C |
| Storage Temperature Range | $ m T_{stg}$ | -55~150 | °C |

Unit in mm



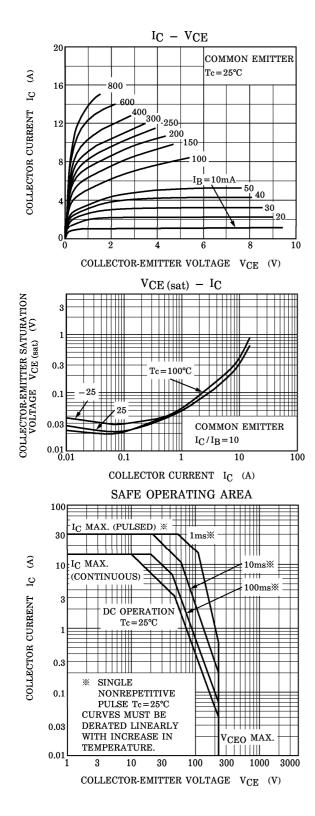
Weight: 4.7g (Typ.)

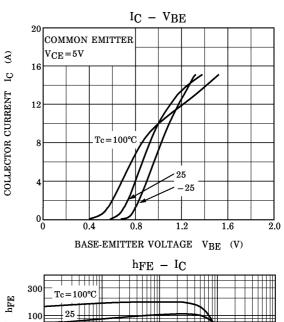
ELECTRICAL CHARACTERISTICS (Tc = 25°C)

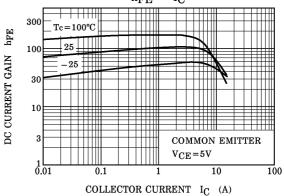
| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|---|-----------------------|---|------|------|------|---------|
| Collector Cut-off Current | I_{CBO} | $V_{CB} = 230V, I_{E} = 0$ | _ | _ | 5.0 | μ A |
| Emitter Cut-off Current | I_{EBO} | $V_{EB}=5V, I_C=0$ | _ | _ | 5.0 | μ A |
| Collector-Emitter Breakdown Voltage | V (BR) CEO | $I_{\rm C} = 50 {\rm mA}, \ I_{\rm B} = 0$ | 230 | _ | _ | V |
| DC Current Gain | hFE (1) (Note) | $V_{\rm CE}$ =5V, $I_{\rm C}$ =1A | 55 | _ | 160 | _ |
| | h _{FE} (2) | $V_{CE}=5V, I_{C}=7A$ | 35 | 87 | _ | |
| Collector-Emitter Saturation Voltage | V _{CE} (sat) | $I_{\rm C} = 8A, I_{\rm B} = 0.8A$ | _ | 0.4 | 3.0 | V |
| Base-Emitter Voltage | $ m V_{BE}$ | $V_{CE}=5V, I_{C}=7A$ | _ | 1.0 | 1.5 | V |
| Transition Frequency | $ m f_{T}$ | $V_{CE}=5V, I_{C}=1A$ | _ | 30 | _ | MHz |
| Collector Output Capacitance | C_{ob} | $V_{CB} = 10V, I_{E} = 0, f = 1MHz$ | _ | 200 | _ | pF |

(Note) $h_{FE(1)}$ Classification $R:55\sim110$, $O:80\sim160$

1 2001-11-05







2 2001-11-05

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