Unit in mm

TOSHIBA TRANSISTOR SILICON PNP TRIPLE DIFFUSED TYPE

2 S A 1 9 3 9

POWER AMPLIFIER APPLICATIONS

- Complementary to 2SC5196
- Recommend for 40W High Fidelity Audio Frequency Amplifier Output Stage.

MAXIMUM RATINGS (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---------------------------------------|-----------------------------|---------|----------------------|
| Collector-Base Voltage | v_{CBO} | -80 | V |
| Collector-Emitter Voltage | V_{CEO} | -80 | V |
| Emitter-Base Voltage | VEBO | -5 | V |
| Collector Current | $I_{\mathbf{C}}$ | -6 | A |
| Base Current | $I_{\mathbf{B}}$ | -0.6 | Α |
| Collector Power Dissipation (Tc=25°C) | PC | 60 | w |
| Junction Temperature | Tj | 150 | $^{\circ}\mathrm{C}$ |
| Storage Temperature Range | $\mathrm{T}_{\mathrm{stg}}$ | -55~150 | °C |

$Ø3.2 \pm 0.2$ 5.45 ± 0.2 5.45 ± 0.2 +0.3

- BASE
- COLLECTOR (HEAT SINK) 2.
- **EMITTER**

JEDEC EIAJ TOSHIBA 2-16C1A

Weight: 4.7g (Typ.)

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|---|-----------------------|------------------------------------|------|-------|------|---------|
| Collector Cut-off Current | I_{CBO} | $V_{CB} = -80V, I_{E} = 0$ | _ | | -5.0 | μ A |
| Emitter Cut-off Current | ${ m I}_{ m EBO}$ | $V_{EB} = -5V, I_{C} = 0$ | _ | | -5.0 | μ A |
| Collector-Emitter Breakdown Voltage | V _(BR) CEO | $I_{C} = -50 \text{mA}, I_{B} = 0$ | -80 | ı | | V |
| DC Current Gain | hFE (1) (Note) | $V_{CE} = -5V, I_{C} = -1A$ | 55 | 1 | 160 | |
| | h _{FE (2)} | $V_{CE} = -5V, I_{C} = -3A$ | 35 | 80 | | |
| Collector-Emitter Saturation Voltage | V _{CE (sat)} | $I_C = -5A, I_B = -0.5A$ | _ | -1.0 | -2.0 | V |
| Base-Emitter Voltage | $V_{ m BE}$ | $V_{CE} = -5V, I_{C} = -3A$ | _ | -0.95 | -1.5 | V |
| Transition Frequency | $ m f_{T}$ | $V_{CE} = -5V, I_{C} = -1A$ | _ | 30 | _ | MHz |
| Collector Output Capacitance | $\mathrm{C_{ob}}$ | $V_{CB} = -10V, I_E = 0, f = 1MHz$ | _ | 180 | _ | pF |

Note: hFE(1) Classification $R:55\sim110, O:80\sim160$

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