TOSHIBA 2SA1942

TOSHIBA TRANSISTOR SILICON PNP TRIPLE DIFFUSED TYPE

2 S A 1 9 4 2

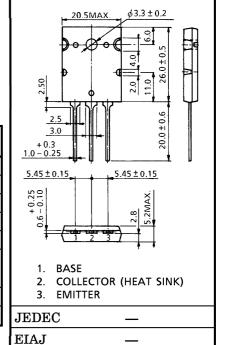
POWER AMPLIFIER APPLICATIONS

- Complementary to 2SC5199
- Recommend for 80 W High Fidelity Audio Frequency Amplifier Output Stage.

MAXIMUM RATINGS (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---|-----------------------------|---------|------|
| Collector-Base Voltage | v_{CBO} | -160 | V |
| Collector-Emitter Voltage | v_{CEO} | -160 | V |
| Emitter-Base Voltage | v_{EBO} | -5 | V |
| Collector Current | $I_{\mathbf{C}}$ | -12 | A |
| Base Current | I_{B} | -1.2 | A |
| Collector Power Dissipation (Tc = 25°C) | PC | 120 | w |
| Junction Temperature | Tj | 150 | °C |
| Storage Temperature Range | $\mathrm{T}_{\mathrm{stg}}$ | -55~150 | °C |

Unit in mm



TOSHIBA 2-21F1A Weight: 9.75 g

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

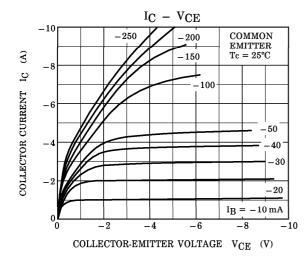
| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|---|-------------------------------|---|------|------|------|---------|
| Collector Cut-off Current | I_{CBO} | $V_{CB} = -160 \text{ V}, I_{E} = 0$ | _ | _ | -5.0 | μ A |
| Emitter Cut-off Current | I_{EBO} | $V_{EB} = -5 V, I_{C} = 0$ | _ | _ | -5.0 | μ A |
| Collector-Emitter Breakdown Voltage | V (BR) CEO | $I_{\rm C} = -50 {\rm mA}, \; I_{\rm B} = 0$ | -160 | _ | _ | V |
| DC Current Gain | h _{FE (1)} (Note) | $V_{CE} = -5 \text{ V}, I_{C} = -1 \text{ A}$ | 55 | _ | 160 | |
| | h _{FE} (2) | $V_{CE} = -5 V, I_{C} = -6 A$ | 35 | 80 | _ | |
| Collector-Emitter Saturation Voltage | V _{CE} (sat) | $I_{\rm C} = -8{\rm A},\ I_{\rm B} = -0.8{\rm A}$ | | -1.1 | -2.5 | V |
| Base-Emitter Voltage | $ m V_{BE}$ | $V_{CE} = -5 \text{ V}, I_{C} = -6 \text{ A}$ | _ | -1.0 | -1.5 | V |
| Transition Frequency | $ m f_T$ | $V_{CE} = -5 \text{ V}, I_{C} = -1 \text{ A}$ | | 30 | | MHz |
| Collector Output Capacitance | C _{ob} | $V_{CB} = -10 V, I_{E} = 0,$ f = 1 MHz | _ | 320 | _ | pF |

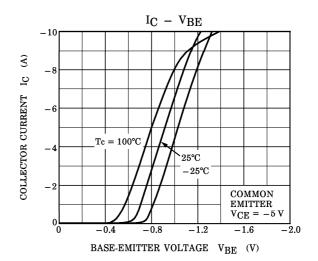
(Note): hFE (1) Classification $R: 55\sim110, O: 80\sim160$

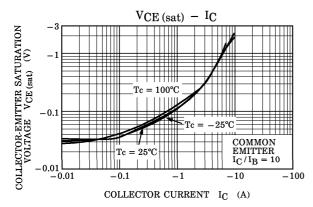
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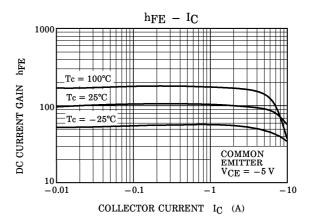
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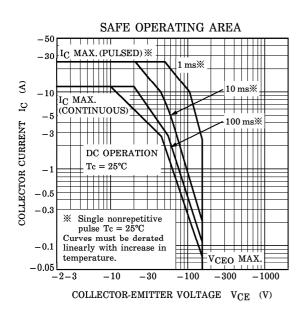
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