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NTE176 Germanium PNP Transistor Audio Power Amplifier

Absolute Maximum Ratings: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

| | |
|--|---------------|
| Collector–Base Voltage, V_{CBO} | 20V |
| Emitter–Base Voltage, V_{EBO} | 10V |
| Continuous Collector Current, I_C | 2A |
| Total Power Dissipation ($T_C = +25^\circ\text{C}$), P_C | 6W |
| Operating Junction Temperature, T_J | +85°C |
| Storage Temperature Range, T_{stg} | -55° to +85°C |

Electrical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|--------------------------------------|---------------|-----------------------------------|-----|------|-----|---------------|
| Collector Cutoff Current | I_{CEO} | $V_{CE} = 10V, I_B = 0$ | – | 0.9 | 10 | mA |
| | I_{CBO} | $V_{CB} = 20V, I_E = 0$ | – | 25 | 500 | μA |
| Emitter Cutoff Current | I_{EBO} | $V_{EB} = 6V, I_C = 0$ | – | 10 | 500 | μA |
| DC Current Gain | h_{FE} | $V_{CB} = 0, I_E = 2A$ | 40 | 75 | – | – |
| Transition Frequency | f_T | $V_{CB} = 2V, I_E = 100\text{mA}$ | 0.3 | 1.2 | – | MHz |
| Base–Emitter Voltage | V_{BE} | $V_{CB} = 0, I_E = 2A$ | – | 0.5 | – | V |
| Collector–Emitter saturation Voltage | $V_{CE(sat)}$ | $I_C = 2A, I_B = 200\text{mA}$ | – | 0.25 | – | V |

