

## NTE2328 (NPN) & NTE2329 (PNP) Silicon Complementary Transistors Audio Power Output

### **Features:**

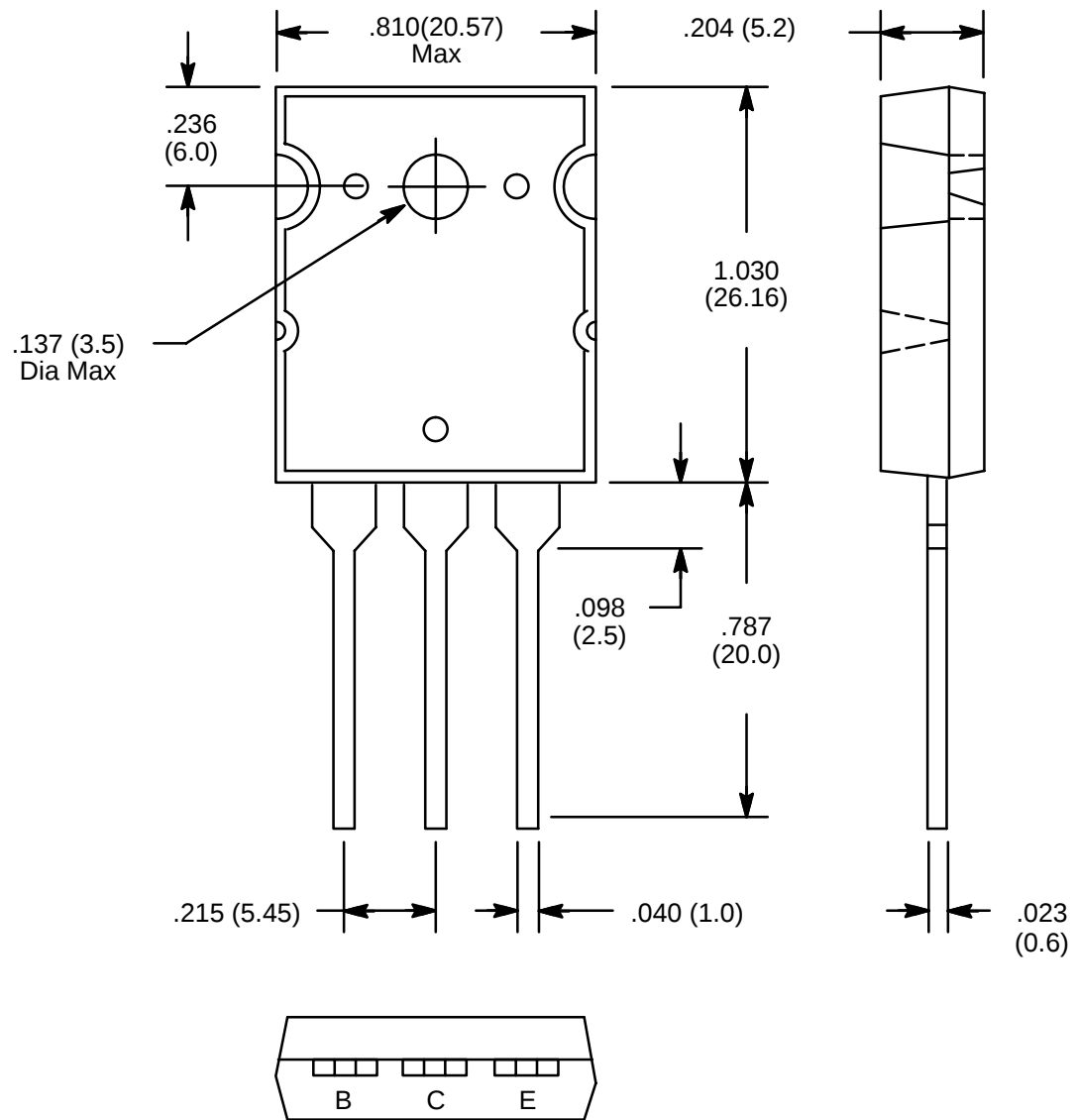
- Recommended for 100W High Fidelity Audio Frequency Amplifier Output Stage

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

|                                                                  |                                     |
|------------------------------------------------------------------|-------------------------------------|
| Collector–Base Voltage, $V_{CBO}$                                | 200V                                |
| Collector–Emitter Voltage, $V_{CEO}$                             | 200V                                |
| Emitter–Base Voltage, $V_{EBO}$                                  | 5V                                  |
| Collector Current, $I_C$                                         | 15A                                 |
| Base Current, $I_B$                                              | 1.5A                                |
| Collector Power Dissipation ( $T_C = +25^\circ\text{C}$ ), $P_C$ | 150W                                |
| Operating Junction Temperature, $T_J$                            | $+150^\circ\text{C}$                |
| Storage Temperature Range, $T_{stg}$                             | $-55^\circ$ to $+150^\circ\text{C}$ |

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

| Parameter                            | Symbol        | Test Conditions                                 | Min | Typ | Max | Unit          |
|--------------------------------------|---------------|-------------------------------------------------|-----|-----|-----|---------------|
| Collector Cutoff Current             | $I_{CBO}$     | $V_{CB} = 200\text{V}, I_E = 0$                 | –   | –   | 5.0 | $\mu\text{A}$ |
| Emitter Cutoff Current               | $I_{EBO}$     | $V_{BE} = 5\text{V}, I_C = 0$                   | –   | –   | 5.0 | $\mu\text{A}$ |
| Collector–Emitter Breakdown Voltage  | $V_{(BR)CEO}$ | $I_C = 50\text{mA}, I_B = 0$                    | 200 | –   | –   | V             |
| DC Current Gain                      | $h_{FE1}$     | $V_{CE} = 5\text{V}, I_C = 1\text{A}$           | 55  | –   | 160 |               |
|                                      | $h_{FE2}$     | $V_{CE} = 5\text{V}, I_C = 8\text{A}$           | 35  | 60  | –   |               |
| Collector–Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C = 10\text{A}, I_B = 1\text{A}$             | –   | 1.5 | 3.0 | V             |
| Base–Emitter Voltage                 | $V_{BE}$      | $V_{CE} = 5\text{V}, I_C = 8\text{A}$           | –   | 1.0 | 1.5 | V             |
| Transistion Frequency                | $f_T$         | $V_{CE} = 5\text{V}, I_C = 1\text{A}$           | –   | 25  | –   | MHz           |
| Collector Output Capacitance         | $C_{ob}$      | $V_{CB} = 10\text{V}, I_E = 0, f = 1\text{MHz}$ | –   | 470 | –   | pF            |



**Note:** Collector connected to heat sink.