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## NTE2693 (NPN) & NTE2694 (PNP) Silicon Complementary Transistors Darlington, General Purpose, Audio TO-220 Full Pack

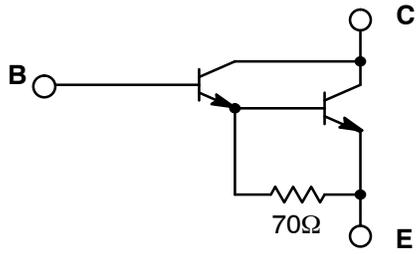
**Absolute Maximum Ratings:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

|  |                |
|--|----------------|
| Collector-Base Voltage, $V_{CBO}$ .....                                | 110V           |
| Collector-Emitter Voltage, $V_{CEO}$ .....                             | 110V           |
| Emitter-Base Voltage, $V_{EBO}$ .....                                  | 5V             |
| Collector Current, $I_C$ .....   | 6A             |
| Base Current, $I_B$ .....  | 1A             |
| Collector Power Dissipation ( $T_C = +25^\circ\text{C}$ ), $P_D$ ..... | 30W            |
| Operating Junction Temperature, $T_J$ .....                            | +150°C         |
| Storage Temperature Range, $T_{stg}$ .....                             | -55° to +150°C |

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

| Parameter                            | Symbol        | Test Conditions                 | Min  | Typ | Max | Unit          |
|--------------------------------------|---------------|---------------------------------|------|-----|-----|---------------|
| Collector Cutoff Current             | $I_{CBO}$     | $V_{CB} = 110V$                 | -    | -   | 100 | $\mu\text{A}$ |
| Emitter Cutoff Current               | $I_{EBO}$     | $V_{EB} = 5V$                   | -    | -   | 100 | $\mu\text{A}$ |
| Collector-Emitter Breakdown Voltage  | $V_{(BR)CEO}$ | $I_C = 30\text{mA}$             | 110  | -   | -   | V             |
| DC Current Gain                      | $h_{FE}$      | $V_{CE} = 4V, I_C = 5A$         | 5000 | -   | -   |               |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C = 5A, I_B = 5\text{mA}$    | -    | -   | 2.5 | V             |
| Base-Emitter Saturation Voltage      | $V_{BE(sat)}$ | $I_C = 5A, I_E = 5\text{mA}$    | -    | -   | 3.0 | V             |
| Current Gain-Bandwidth Product       | $f_T$         | $V_{CE} = 12V, I_E = -0.5A$     | -    | 60  | -   | MHz           |
| Capacitance                          | $C_{OB}$      | $V_{CB} = 10V, f = 1\text{MHz}$ | -    | 55  | -   | pF            |

NTE2693



NTE2694

