



ELECTRONICS, INC.
 44 FARRAND STREET
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NTE2541 (NPN) & NTE2542 (PNP) Silicon Complementary Transistors Darlington, Motor/Relay Driver

Absolute Maximum Ratings:

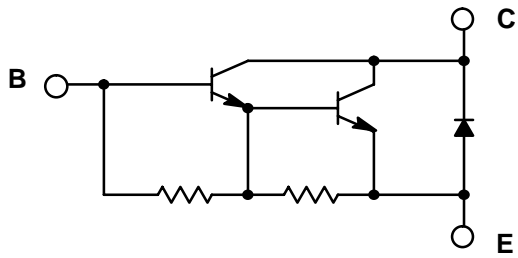
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|--|----------------|
| Collector Base Voltage, V_{CBO} | 120V |
| Collector Emitter Voltage, V_{CEO} | 120V |
| Emitter Base Voltage, V_{EBO} | 6V |
| Collector Current, I_C | |
| Continuous | 25A |
| Pulse | 40A |
| Continuous Base Current, I_B | 2A |
| Collector Power Dissipation ($T_{FL} = +25^{\circ}C$), P_C | 120W |
| Operating Junction Temperature, T_J | +150°C |
| Storage Temperature Range, T_{stg} | -55° to +150°C |

Electrical Characteristics: (Note 1)

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|--------------------------------------|---------------|-------------------------------|------|-----|-----|---------|
| Collector Cutoff Current | I_{CBO} | $V_{CB} = 120V, I_E = 0$ | - | - | 10 | μA |
| Emitter Cutoff Current | I_{EBO} | $V_{EB} = 6V, I_C = 0$ | 10 | - | - | mA |
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C = 25mA, R_{BE} = \infty$ | 120 | - | - | V |
| DC Current Gain | h_{FE} | $V_{CE} = 4V, I_C = 12A$ | 2000 | - | - | |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C = 12A, I_B = 24mA$ | - | - | 1.8 | V |
| Base-Emitter Saturation Voltage | $V_{BE(sat)}$ | $I_C = 12A, I_B = 24mA$ | - | - | 2.5 | V |

Note 1. For NTE2542, the polarity is reversed.

NTE2541
(NPN)



NTE2542
(PNP)

