



ELECTRONICS, INC.
 44 FARRAND STREET
 BLOOMFIELD, NJ 07003
 (973) 748-5089

NTE2536 (NPN) & NTE2537 (PNP) Silicon Complementary Transistors High Current Switch

Features:

- High Current Capacity
- Wide ASO Range
- Low Saturation Voltage

Applications:

- Motor Drivers
- Relay Drivers
- Converters

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

| | |
|--|----------------|
| Collector Base Voltage, V_{CBO} | 110V |
| Collector Emitter Voltage, V_{CEO} | 100V |
| Emitter Base Voltage, V_{EBO} | 6V |
| Collector Current, I_C | |
| Continuous | 40A |
| Peak | 65A |
| Base Current, I_B | 12A |
| Collector Power Dissipation ($T_C = +25^\circ\text{C}$), P_C | 150W |
| 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} | $V_{CB} = 100V, I_E = 0$ | - | - | 0.1 | mA |
| Emitter Cutoff Current | I_{EBO} | $V_{EB} = 5V, I_C = 0$ | - | - | 0.1 | mA |
| DC Current Gain | h_{FE} | $V_{CE} = 2V, I_C = 4A$ | 50 | - | 140 | |
| | | $V_{CE} = 2V, I_C = 16A$ | 20 | - | - | |
| Collector Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C = 16A, I_B = 1.6A$ | - | - | 0.8 | V |
| Base Emitter Saturation Voltage | $V_{BE(sat)}$ | $I_C = 16A, I_B = 1.6A$ | - | - | 1.5 | V |
| Collector Base Breakdown Voltage | $V_{(BR)CBO}$ | $I_C = 1mA, I_E = 0$ | 110 | - | - | V |
| Collector Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C = 5mA, R_{BE} = \infty$ | 100 | - | - | V |
| Emitter Base Breakdown Voltage | $V_{(BR)EBO}$ | $I_E = 1mA, I_C = 0$ | 6 | - | - | V |

