



NTE2677

Silicon NPN Transistor

High Voltage, High Speed Switch

TO3P(H)IS Type Package

Features:

- High Breakdown Voltage: $V_{CBO} = 1500V$ Min
- High Switching Speed
- Low Saturation Voltage

Applications:

- Color TV Horizontal Deflection Output

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

| | | |
|--|-------|----------------|
| Collector–Base Voltage, V_{CBO} | | 1500V |
| Collector–Emitter Voltage, V_{CEO} | | 800V |
| Emitter–Base Voltage, V_{EBO} | | 6V |
| Collector Current, I_C | | |
| Continuous | | 10A |
| Pulse | | 30A |
| Continuous Base Current, I_B | | 5A |
| Collector Power Dissipation ($T_C = +25^\circ C$), P_C | | 70W |
| Operating Junction Temperature, T_J | | +150°C |
| Storage Temperature Range, T_{stg} | | –55° to +150°C |

Electrical Characteristics: ($T_C = +25^\circ C$ unless otherwise specified)

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|--------------------------------------|---------------|--|-----|-----|-----|---------|
| Collector–Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C = 8A, I_B = 1.6A$ | – | – | 5.0 | V |
| Base–Emitter Saturation Voltage | $V_{BE(sat)}$ | $I_C = 8A, I_B = 1.6A$ | – | – | 1.5 | V |
| Collector Cutoff Current | I_{CES} | $V_{CE} = 1400V, V_{BE} = 0$ | – | – | 1.0 | mA |
| | I_{CBO} | $V_{CB} = 800V, I_E = 0$ | – | – | 10 | μA |
| | | $V_{EB} = 4V, I_C = 0$ | – | – | 1.0 | mA |
| DC Current Gain | h_{FE} | $I_C = 1A, V_{CE} = 5V$ | 15 | – | 40 | |
| | | $I_C = 8A, V_{CE} = 5V$ | 8 | – | 10 | |
| Fall Time | t_f | $I_C = 6A, I_{B1} = 1.2A, I_{B2} = -2.4A, V_{CC} = 200V, R_L = 33.3\Omega$ | – | – | 0.3 | μs |

