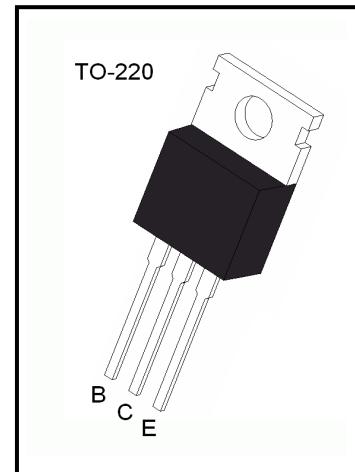


NPN Epitaxial Silicon Transistor**Medium Power Linear Switching Applications**

- Complementary to TIP42/42A/42B/42C

Absolute Maximum Rating (Ta=25°C)

| Parameter | Symbol | Value | | | | Unit |
|---|-------------------|---------|--------|--------|--------|------|
| | | TIP41 | TIP41A | TIP41B | TIP41C | |
| Collector-Base Voltage | V _{CBO} | 40 | 60 | 80 | 100 | V |
| Collector-Emitter Voltage | V _{C EO} | 40 | 60 | 80 | 100 | V |
| Emitter-Base Voltage | V _{EBO} | 5 | | | | V |
| Collector Current(DC) | I _C | 3 | | | | A |
| Collector Dissipation Ta =25 °C Tc =25 °C | P _C | 2 | | | W | |
| | | 40 | | | | |
| Junction Temperature | T _j | 150 | | | | °C |
| Storage Temperature | T _{stg} | -65~150 | | | | °C |

**Electrical Characteristics (Ta=25°C)**

| Parameter | Symbol | Conditions | Value | | | Unit |
|---------------------------------------|-------------------------------------|---|-----------------------|-----|-----|------|
| | | | Min | Typ | Max | |
| Collector-Emitter Sustaining Voltage | TIP41 TIP41A TIP41B TIP41C | V _{C EO(sus)} I _C = 30mA, I _B = 0 | 40 60 80 100 | | | V |
| Collector cut-off current | TIP41 TIP41A TIP41B TIP41C | I _{CBO} V _{CE} =40V, I _E = 0 V _{CE} = 60V, I _E = 0 V _{CE} = 80V, I _E = 0 V _{CE} = 100V, I _E = 0 | | | 200 | µA |
| Collector cut-off current | TIP41/41A TIP41B/41C | I _{CEO} V _{CB} =30V, I _E = 0 V _{CB} = 60V, I _E = 0 | | | 0.3 | mA |
| Emitter cut-off current | | V _{EB} = 5V, I _C = 0 | | | 1 | mA |
| * DC current gain | h _{FE} | V _{CE} = 4V, I _C = 1A V _{CE} = 4V, I _C = 3A | 25 10 | | 50 | |
| *Collector-emitter saturation voltage | V _{C E(sat)} | I _C = 3A, I _B = 375mA | | | 1.2 | V |
| * Base-Emitter ON Voltage | V _{BE} (on) | V _{CE} = 4V, I _C = 3A | | | 1.8 | V |
| Current Gain Bandwidth Product | f _T | V _{CE} = 10V, I _C = 500mA | 3.0 | | | MHz |

* Pulse Test : PW≤300µs, Duty cycle≤2%