



Complementary Silicon Power Transistors

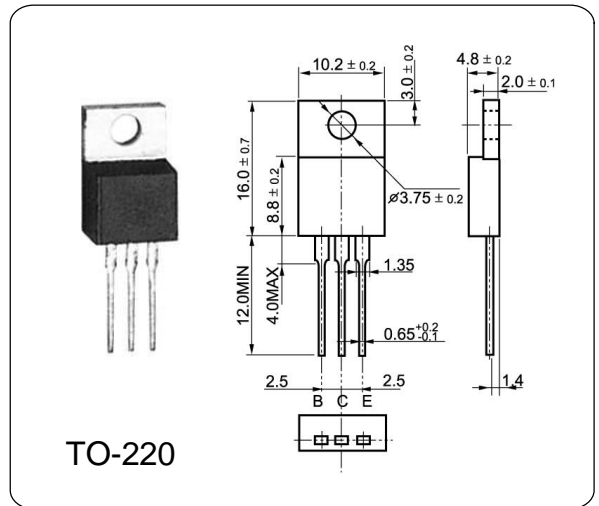
2N6292 / 2N6107

DESCRIPTION

It is intended for use in power amplifier and switching applications.

ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

| Parameter | Symbol | Value | Unit |
|-------------------------------------|-----------|---------|------|
| Collector-Base Voltage | V_{CBO} | 80 | V |
| Collector-Emitter Voltage | V_{CEO} | 70 | V |
| Emitter-Base Voltage | V_{EBO} | 5 | V |
| Collector Current | I_C | 7.0 | A |
| Base Current | I_B | 3.0 | A |
| Total Dissipation at | P_{tot} | 40 | W |
| Max. Operating Junction Temperature | T_j | 150 | °C |
| Storage Temperature | T_{stg} | -55~150 | °C |



ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

| Parameter | Symbol | Test Conditions | Min. | Typ. | Max. | Unit |
|--------------------------------------|---------------|--------------------------|------|------|------|------|
| Collector Cut-off Current | I_{CEO} | $V_{CB}=60V, I_E=0$ | — | — | 0.3 | mA |
| Emitter Cut-off Current | I_{EBO} | $V_{EB}=5V, I_C=0$ | — | — | 1.0 | mA |
| Collector-Emitter Sustaining Voltage | V_{CEO} | $I_C=10mA, I_B=0$ | 70 | — | — | V |
| DC Current Gain | $h_{FE(1)}$ | $V_{CE}=4V, I_C=2.0A$ | 30 | — | 150 | |
| | $h_{FE(2)}$ | $V_{CE}=4V, I_C=7.0A$ | 2.3 | — | — | |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=7.0A, I_B=3.0A$ | — | — | 3.5 | V |
| Base-Emitter On Voltage | $V_{BE(on)}$ | $V_{CE}=4V, I_C=7.0A$ | — | — | 3.0 | V |
| Current Gain Bandwidth Product | f_T | $V_{CE}=4.0V, I_C=500mA$ | 4.0 | — | — | MHz |