



**COMPLEMENTARY SILICON POWER TRANSISTORS**

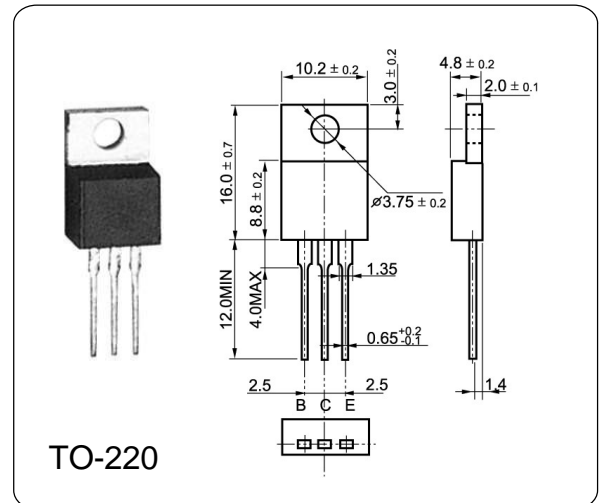
**2N6488**

**DESCRIPTION**

The 2N6488 is silicon epitaxial-base NPN transistors in Jedec TO-220 plastic package. They are intended for use in power linear and low frequency switching applications.

**ABSOLUTE MAXIMUM RATINGS ( Ta = 25 °C)**

| Parameter                           | Symbol    | Value   | Unit |
|-------------------------------------|-----------|---------|------|
| Collector-Base Voltage              | $V_{CBO}$ | 90      | V    |
| Collector-Emitter Voltage           | $V_{CEO}$ | 90      | V    |
| Emitter-Base Voltage                | $V_{EBO}$ | 5       | V    |
| Collector Current                   | $I_C$     | 15      | A    |
| Base Current                        | $I_B$     | 5.0     | A    |
| Total Dissipation at                | $P_{tot}$ | 75      | 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            | $I_{CEO}$     | $V_{CB}=80V, I_E=0$      | —    | —    | 0.3  | mA   |
| Emitter Cut-off Current              | $I_{EBO}$     | $V_{EB}=5V, I_C=0$       | —    | —    | 1.0  | mA   |
| Collector-Emitter Sustaining Voltage | $V_{CEO}$     | $I_C=10mA, I_B=0$        | 80   | —    | —    | V    |
| DC Current Gain                      | $h_{FE(1)}$   | $V_{CE}=4V, I_C=0.5A$    | 50   | —    | —    |      |
|                                      | $h_{FE(2)}$   | $V_{CE}=4V, I_C=1.0A$    | 80   | —    | 200  |      |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=5.0A, I_B=500mA$    | —    | —    | 1.2  | V    |
| Base-Emitter Voltage                 | $V_{BE(sat)}$ | $I_C=5.0A, I_B=500mA$    | —    | —    | 2.0  | V    |
| Current Gain Bandwidth Product       | $f_T$         | $V_{CE}=4.0V, I_C=500mA$ | 4    | —    | —    | MHz  |