

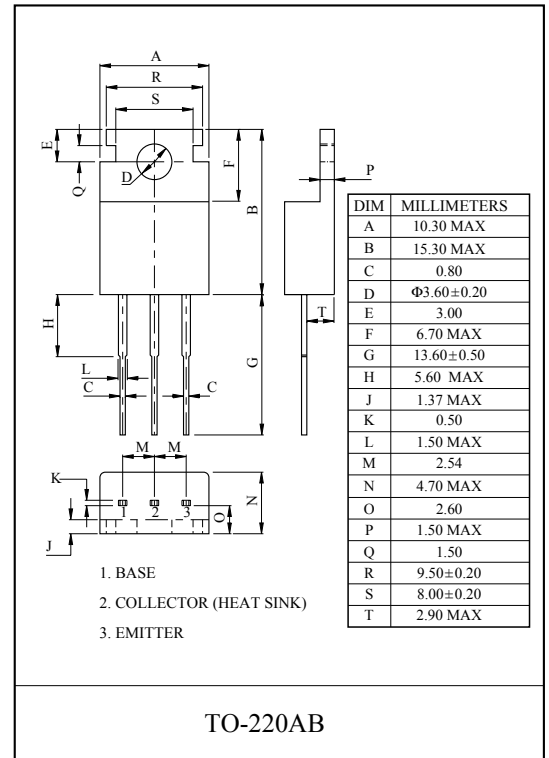
GENERAL PURPOSE APPLICATION.

FEATURES

- Complementary to TIP42C.

MAXIMUM RATING (Ta=25°C)

| CHARACTERISTIC | | SYMBOL | RATING | UNIT |
|-----------------------------|---------|-----------|-----------|------|
| Collector-Base Voltage | | V_{CBO} | 100 | V |
| Collector-Emitter Voltage | | V_{CEO} | 100 | V |
| Emitter-Base Voltage | | V_{EBO} | 5 | V |
| Collector Current | DC | I_C | 6 | A |
| | Pulse | I_{CP} | 10 | |
| Base Current | | I_B | 2 | A |
| Collector Power Dissipation | Ta=25°C | P_C | 2 | W |
| | Tc=25°C | | 65 | |
| Junction Temperature | | T_j | 150 | °C |
| Storage Temperature Range | | T_{sig} | -55 ~ 150 | °C |

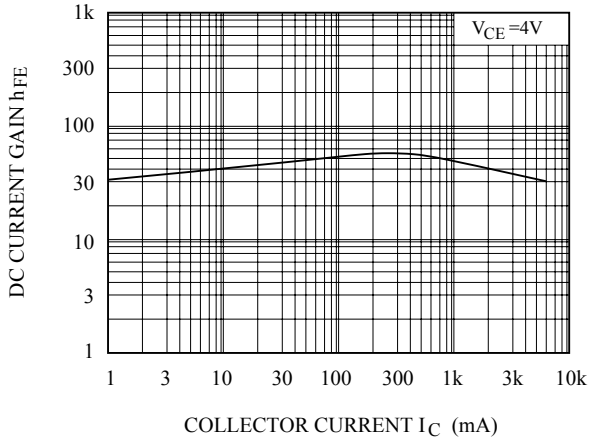


ELECTRICAL CHARACTERISTICS (Ta=25°C)

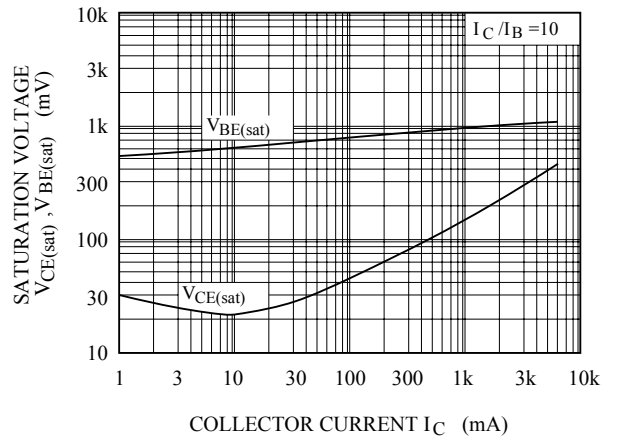
| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|----------------|-------------------------|------|------|------|------|
| Collector Emitter Sustaining Voltage | $V_{CEO(SUS)}$ | $I_C=30mA, I_B=0$ | 100 | - | - | V |
| Collector Cut-off Current | I_{CEO} | $V_{CE}=60V, I_B=0$ | - | - | 0.7 | mA |
| Collector Cut-off Current | I_{CES} | $V_{CE}=100V, V_{EB}=0$ | - | - | 400 | μA |
| Emitter Cut-off Current | I_{EBO} | $V_{EB}=5V, I_C=0$ | - | - | 1 | mA |
| DC Current Gain | h_{FE} | $V_{CE}=4V, I_C=0.3A$ | 30 | - | - | |
| | | $V_{CE}=4V, I_C=3A$ | 15 | - | 75 | |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=6A, I_B=600mA$ | - | - | 1.5 | V |
| Base-Emitter On Voltage | $V_{BE(on)}$ | $V_{CE}=4V, I_C=6A$ | - | - | 2.0 | V |
| Transition Frequency | f_T | $V_{CE}=10V, I_C=500mA$ | 3.0 | - | - | MHz |

TIP41C

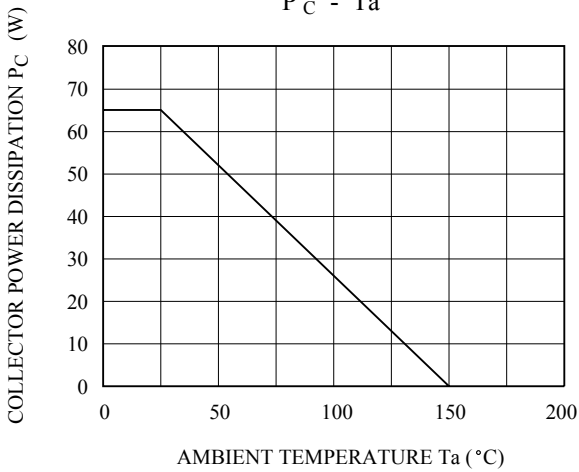
$h_{FE} - I_C$



$V_{CE(sat)}, V_{BE(sat)} - I_C$



$P_C - T_a$



SAFE OPERATING AREA

