

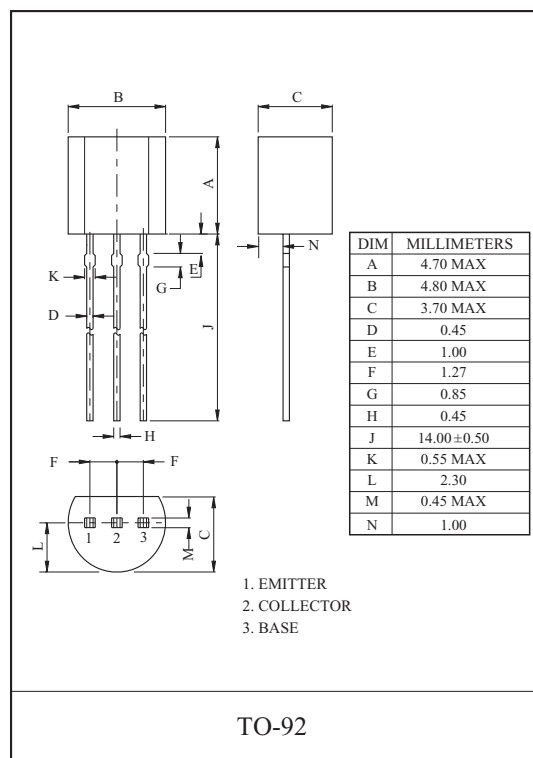
HIGH VOLTAGE SWITCHING AND AMPLIFIER APPLICATION.
COLOR TV CHROMA OUTPUT APPLICATIONS.

FEATURES

- High Voltage : $V_{CEO} > 300V$
- Complementary to BF421.

MAXIMUM RATING (Ta=25 °C)

| CHARACTERISTIC | | SYMBOL | RATING | UNIT |
|-----------------------------|------|-----------|-----------|------|
| Collector-Base Voltage | | V_{CBO} | 300 | V |
| Collector-Emitter Voltage | | V_{CEO} | 300 | V |
| Emitter-Base Voltage | | V_{EBO} | 5 | V |
| Collector Current | DC | I_C | 50 | mA |
| | Peak | I_{CP} | 100 | |
| Collector Power Dissipation | | P_C | 625 | mW |
| Base Current | | I_B | 50 | mA |
| Junction Temperature | | T_j | 150 | °C |
| Storage Temperature Range | | T_{stg} | -65 ~ 150 | °C |

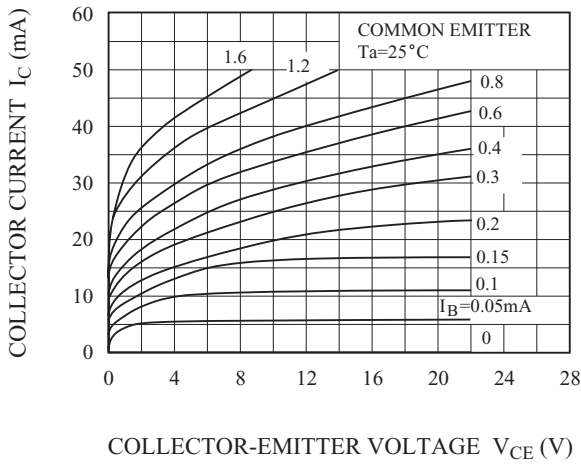


ELECTRICAL CHARACTERISTICS (Ta=25 °C)

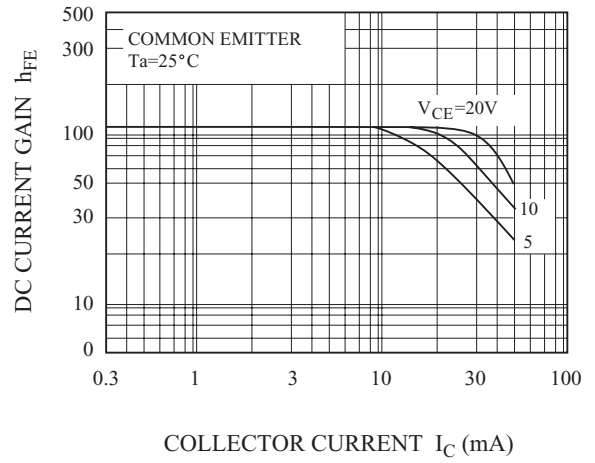
| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|---------------|----------------------------------|------|------|------|------|
| Collector Cut-off Current | I_{CBO} | $V_{CB}=200V, I_E=0$ | - | - | 10 | nA |
| | | $V_{CB}=200V, I_E=0, T_j=150 °C$ | - | - | 10 | μA |
| Emitter Cut-off Current | I_{EBO} | $V_{EB}=5V, I_C=0$ | - | - | 50 | nA |
| DC Current Gain | h_{FE} | $V_{CE}=20V, I_C=25mA$ | 50 | - | - | - |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=30mA, I_B=5mA$ | - | - | 0.6 | V |
| Base-Emitter Voltage | V_{BE} | $V_{CE}=20V, I_C=25mA$ | - | 0.75 | - | V |
| Transition Frequency | f_T | $V_{CE}=10V, I_C=10mA$ | 60 | - | - | MHz |
| Reverse Transfer Capacitance | C_{re} | $V_{CB}=30V, I_E=0, f=1MHz$ | - | - | 1.6 | pF |

BF420

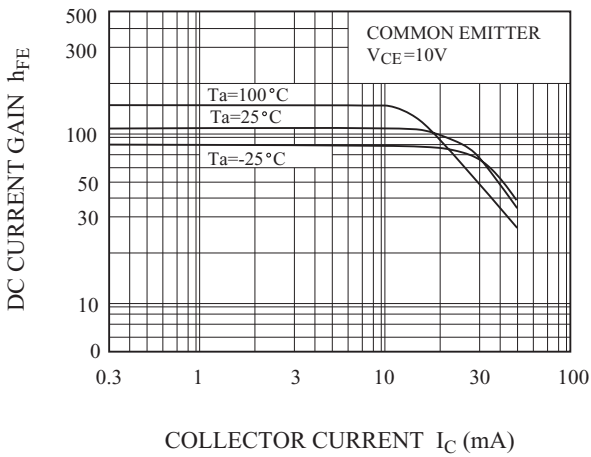
$I_C - V_{CE}$ (LOW VOLTAGE REGION)



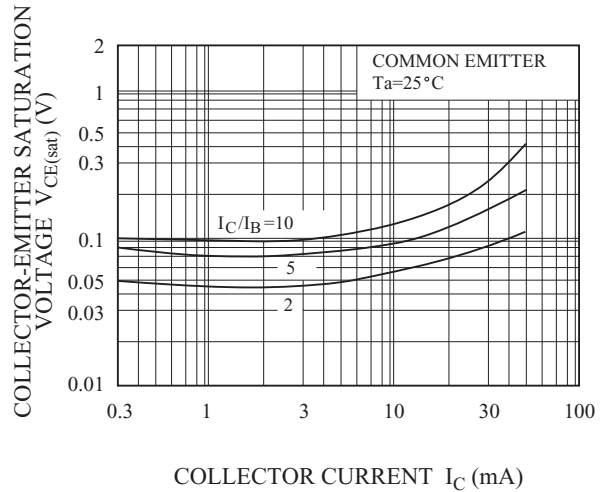
$h_{FE} - I_C$



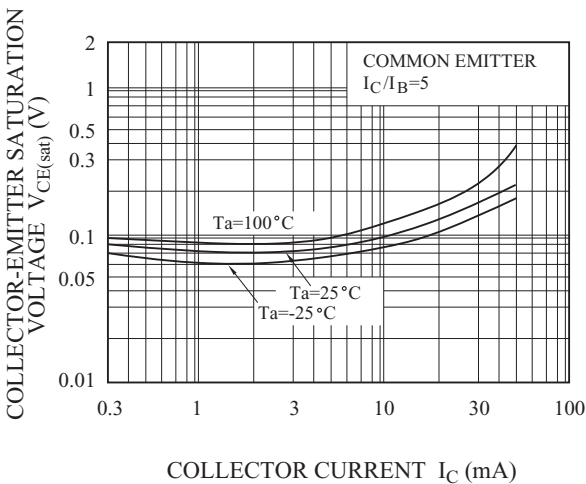
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$V_{CE(sat)} - I_C$



$I_C - V_{BE}$

