

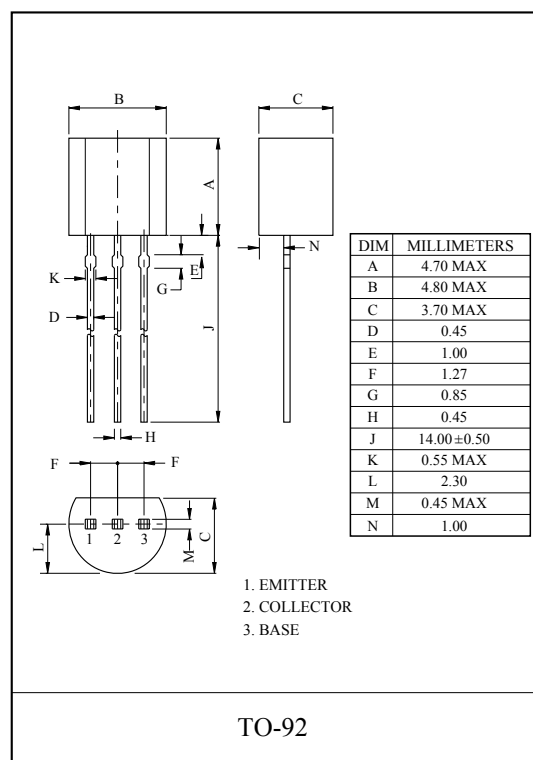
HIGH VOLTAGE SWITCHING AND AMPLIFIER APPLICATION.  
COLOR TV CHROMA OUTPUT APPLICATIONS.

## FEATURES

- High Voltage :  $V_{CEO} > 250V$
- Complementary to BF423.

## MAXIMUM RATING (Ta=25°C)

| CHARACTERISTIC              |      | SYMBOL    | RATING    | UNIT |
|-----------------------------|------|-----------|-----------|------|
| Collector-Base Voltage      |      | $V_{CBO}$ | 250       | V    |
| Collector-Emitter Voltage   |      | $V_{CEO}$ | 250       | 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   |

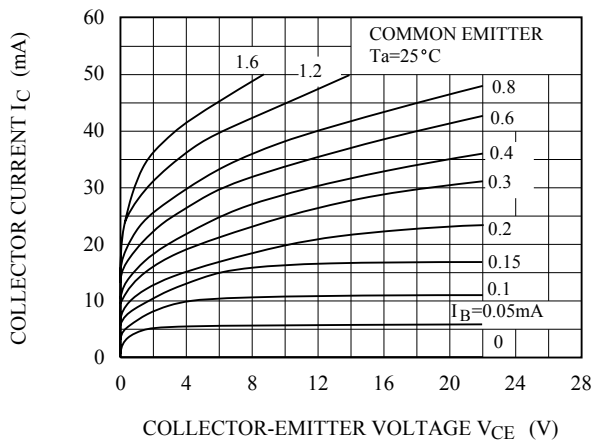


## ELECTRICAL CHARACTERISTICS (Ta=25°C)

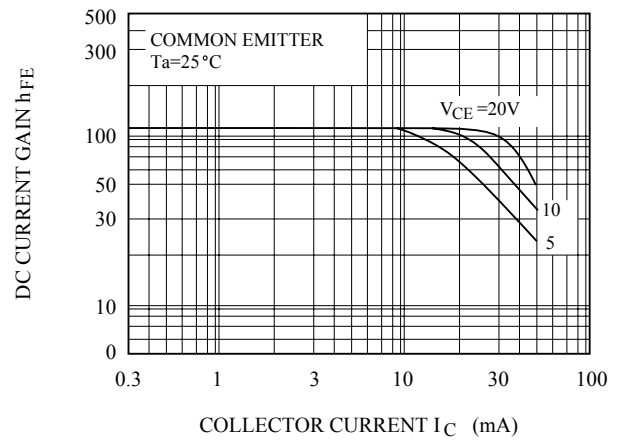
| CHARACTERISTIC                       | SYMBOL        | TEST CONDITION                        | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|---------------|---------------------------------------|------|------|------|------|
| Collector Cut-off Current            | $I_{CBO}$     | $V_{CB}=200V, I_E=0$                  | -    | -    | 10   | nA   |
|                                      |               | $V_{CB}=200V, I_E=0, T_j=150^\circ C$ | -    | -    | 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   |

# BF422

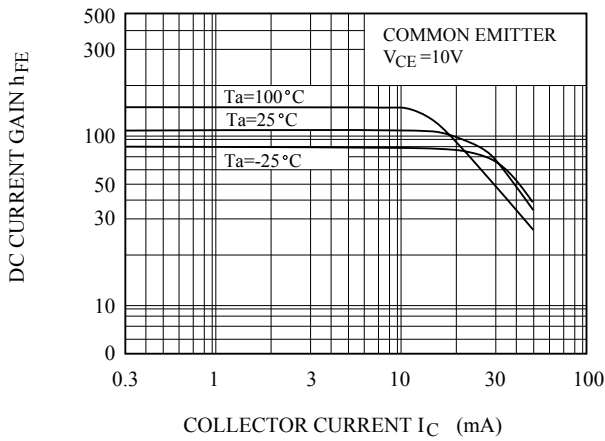
$I_C - V_{CE}$  (LOW VOLTAGE REGION)



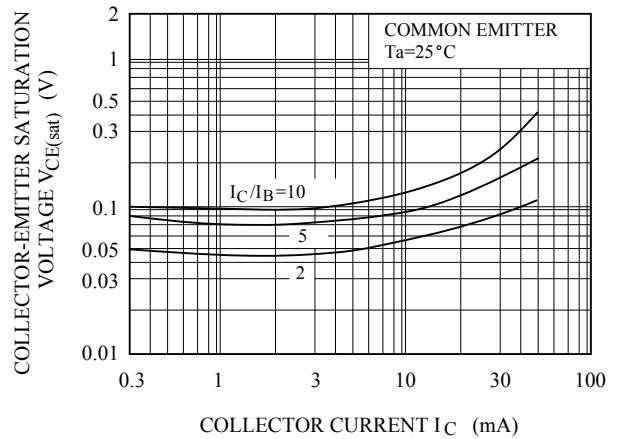
$h_{FE} - I_C$



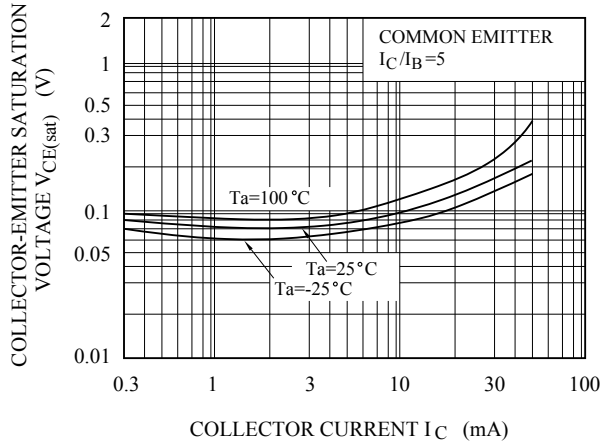
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$V_{CE(sat)} - I_C$



$I_C - V_{BE}$

