

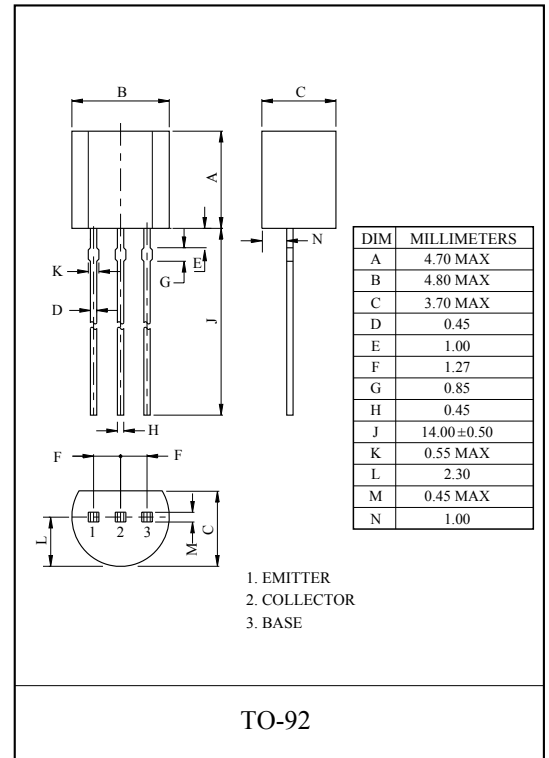
HIGH VOLTAGE SWITCHING AND AMPLIFIER APPLICATION.
COLOR TV CHROMA OUTPUT APPLICATIONS.

FEATURES

- High Voltage : $V_{CEO} > -300V$
- Complementary to BF422.

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 |

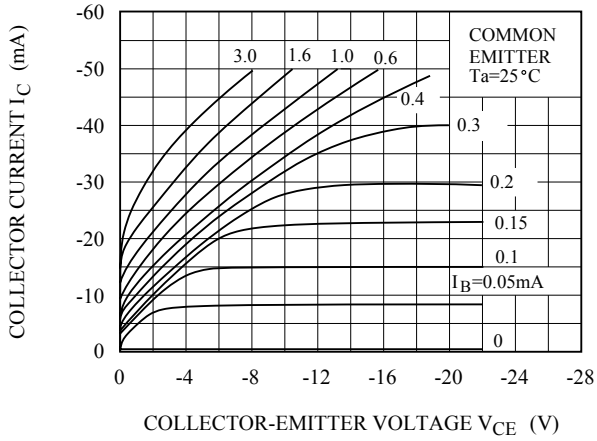


ELECTRICAL CHARACTERISTICS (Ta=25°C)

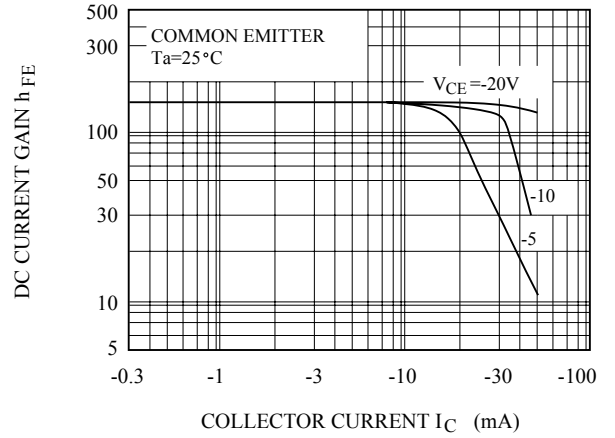
| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|---------------|--|------|-------|------|---------|
| Collector Cut-off Current | I_{CBO} | $V_{CB} = -200V, I_E = 0$ | - | - | -10 | nA |
| | | $V_{CB} = -200V, I_E = 0, T_j = 150^\circ C$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

BF423

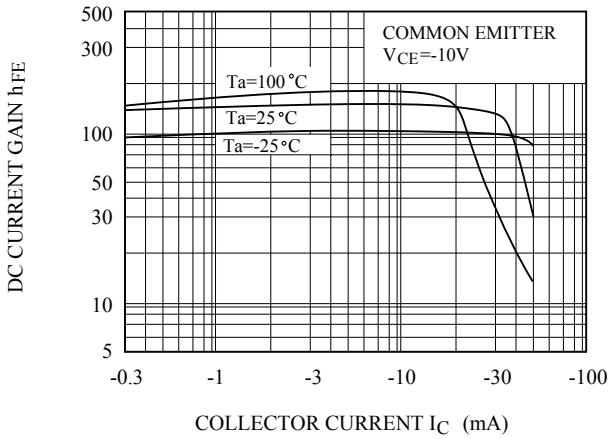
$I_C - V_{CE}$ (LOW VOLTAGE REGION)



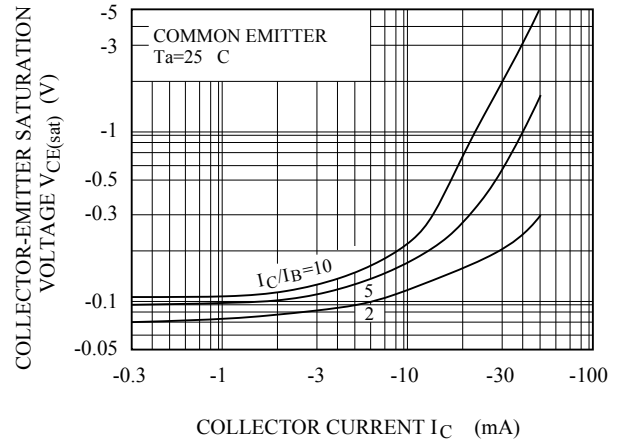
$h_{FE} - I_C$



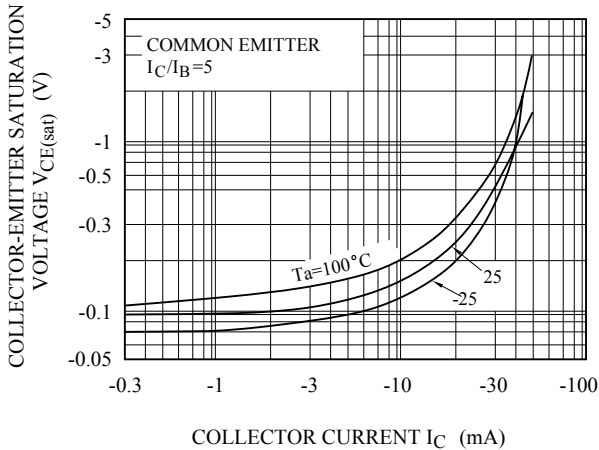
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$V_{CE(sat)} - I_C$



$I_C - V_{BE}$

