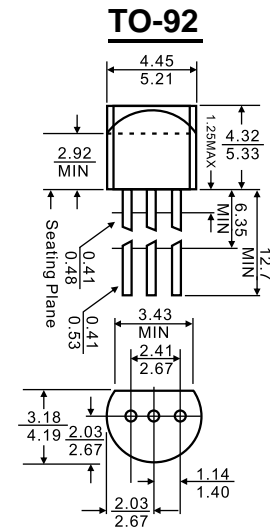




1. EMITTER
2. COLLECTOR
3. BASE



Features

- ◇ Low feedback capacitance.
- ◇ PNP transistors in a TO-92 plastic package.
NPN complements: BF420 and BF422
- ◇ Class-B video output stages in colour television and professional monitor equipment.

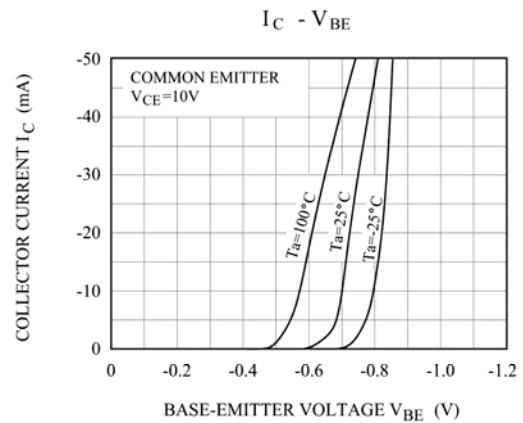
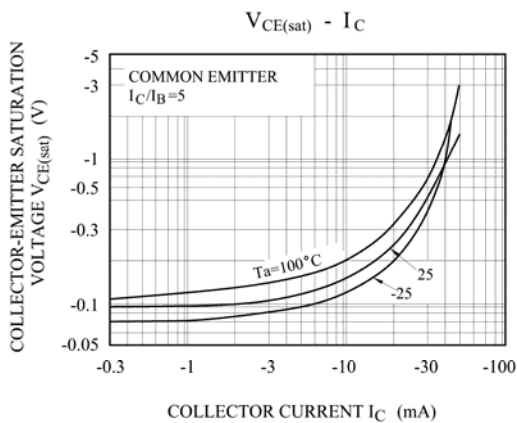
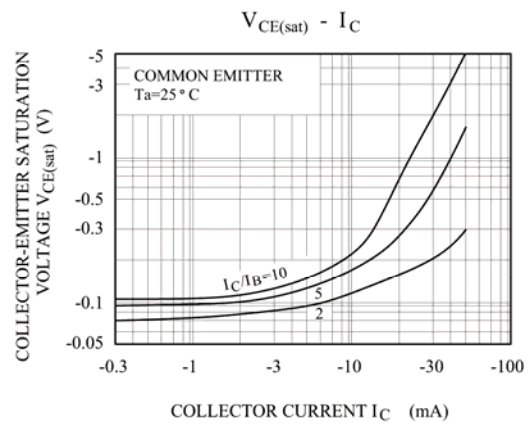
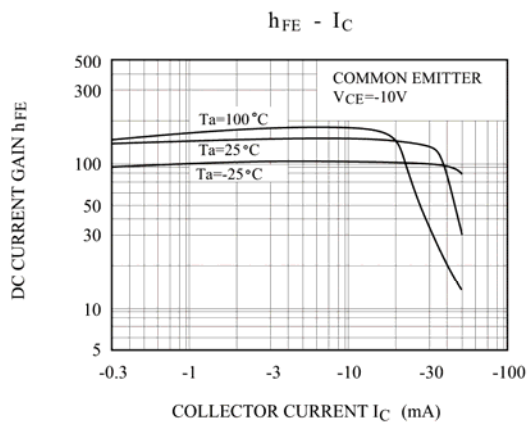
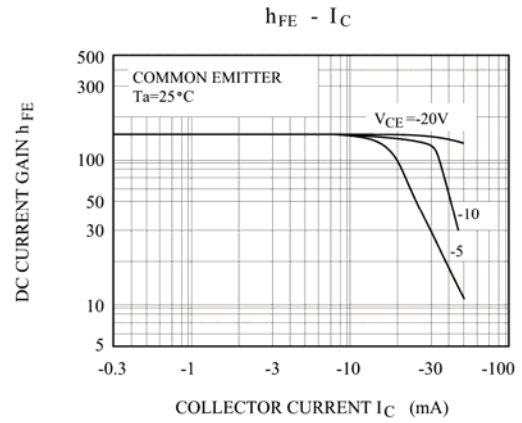
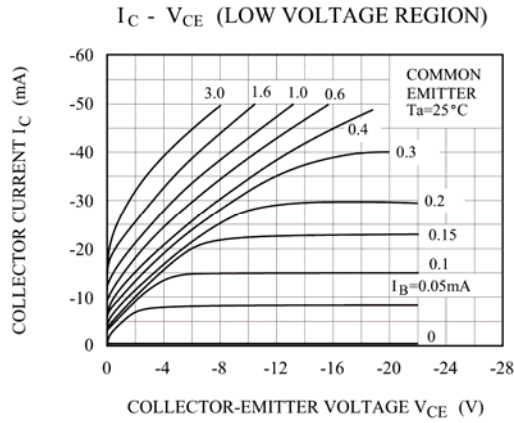
MAXIMUM RATINGS ($T_A=25^\circ\text{C}$ unless otherwise noted)

Dimensions in inches and (millimeters)

| Symbol | Parameter | BF421 | BF423 | Units |
|---------------|---|-----------|-------|---------------------------|
| V_{CBO} | Collector-Base Voltage | -300 | -250 | V |
| V_{CEO} | Collector-Emitter Voltage | -300 | -250 | V |
| V_{EBO} | Emitter-Base Voltage | -5 | | V |
| I_C | Collector Current -Continuous | -100 | | mA |
| P_C | Collector Power Dissipation | 0.625 | | W |
| $R_{th\ j-a}$ | thermal resistance from junction to ambient | 150 | | $^\circ\text{C}/\text{W}$ |
| T_j | junction temperature | 150 | | $^\circ\text{C}$ |
| T_{stg} | Storage Temperature Range | -65to+150 | | $^\circ\text{C}$ |

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^\circ\text{C}$ unless otherwise specified)

| Parameter | Symbol | Test conditions | MIN | MAX | UNIT |
|--------------------------------------|----------------|---|--------------|---------------|---------------|
| Collector-base breakdown voltage | BF421 BF423 | $V_{(BR)CBO}$ $I_C=-100\mu\text{A}, I_E=0$ | -300 -250 | | V |
| Collector-emitter breakdown voltage | BF421 BF423 | $V_{(BR)CEO}$ $I_C=-1\text{mA}, I_B=0$ | -300 -250 | | V |
| Emitter-base breakdown voltage | | $V_{(BR)EBO}$ $I_E=-100\mu\text{A}, I_C=0$ | -5 | | V |
| Collector cut-off current | | I_{CBO} $V_{CB}=-200\text{V}, I_E=0$ | | -0.01 | μA |
| Emitter cut-off current | BF421 BF423 | I_{EBO} $V_{EB}=-5\text{V}, I_C=0$ | | -0.1 -0.05 | μA |
| DC current gain | | h_{FE} $V_{CE}=-20\text{V}, I_C=-25\text{mA}$ | 50 | | |
| Collector-emitter saturation voltage | BF421 BF423 | $V_{CE(sat)}$ $I_C=-20\text{mA}, I_B=-2\text{mA}$ $I_C=-30\text{mA}, I_B=-5\text{mA}$ | | -0.6 | V |
| Transition frequency | | f_T $V_{CE}=-10\text{V}, I_C=-10\text{mA}$ $f=100\text{MHz}$ | 60 | | MHz |
| Feedback capacitance | | C_{re} $V_{CE}=-30\text{V}, I_C=0, f=1\text{MHz}$ | | 1.6 | pF |

Typical Characteristics


Typical Characteristics

