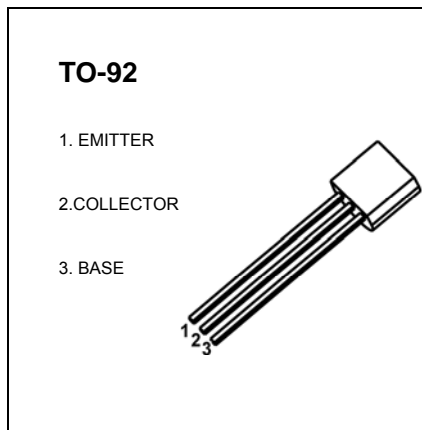


## TO-92 Plastic-Encapsulate Transistors

### BF421 TRANSISTOR (PNP) BF423

#### 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<sub>a</sub>=25°C unless otherwise noted)

Symbol	Parameter	BF421	BF423	Unit
V <sub>CBO</sub>	Collector-Base Voltage	-300	-250	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-300	-250	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5		V
I <sub>C</sub>	Collector Current -Continuous	-100		mA
P <sub>C</sub>	Collector Power Dissipation	0.83		W
R <sub>th j-a</sub>	thermal resistance from junction to ambient	151		°C/W
T <sub>j</sub>	junction temperature	150		°C
T <sub>stg</sub>	Storage Temperature Range	-55~+150		°C

#### ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	BF421 BF423	V <sub>(BR)CBO</sub> I <sub>C</sub> =-100μA, I <sub>E</sub> =0	-300 -250		V
Collector-emitter breakdown voltage	BF421 BF423	V <sub>(BR)CEO</sub> I <sub>C</sub> = -1mA, I <sub>B</sub> =0	-300 -250		V
Emitter-base breakdown voltage		V <sub>(BR)EBO</sub> I <sub>E</sub> =-100μA, I <sub>C</sub> =0	-5		V
Collector cut-off current		I <sub>CBO</sub> V <sub>CB</sub> =-200 V, I <sub>E</sub> =0		-0.01	μA
Emitter cut-off current	BF421 BF423	I <sub>EBO</sub> V <sub>EB</sub> =-5V, I <sub>C</sub> =0		-0.1 -0.05	μA
DC current gain		h <sub>FE</sub> V <sub>CE</sub> =-20V, I <sub>C</sub> =-25mA	50		
Collector-emitter saturation voltage	BF421 BF423	V <sub>CE(sat)</sub> I <sub>C</sub> =-20mA, I <sub>B</sub> =-2mA I <sub>C</sub> =-30mA, I <sub>B</sub> =-5mA		-0.6	V
Transition frequency		f <sub>T</sub> V <sub>CE</sub> =-10V, I <sub>C</sub> =-10mA f = 100MHz	60		MHz
Feedback capacitance		C <sub>re</sub> V <sub>CE</sub> =-30V, I <sub>C</sub> =0, f=1MHz		1.6	pF