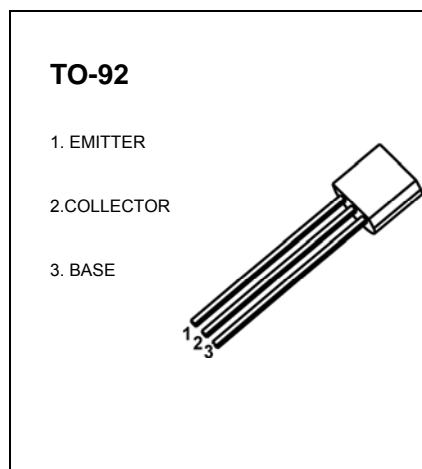


TO-92 Plastic-Encapsulate Transistors

BF420 TRANSISTOR (NPN) **BF422**

FEATURES

- Low feedback capacitance.
- NPN transistors in a TO-92 plastic package.
PNP complements: BF421 and BF423
- Class-B video output stages in colour television and professional monitor equipment.



MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	BF420	BF422	Unit
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	200		°C/W
T _j	junction temperature	150		°C
T _{stg}	Storage Temperature Range	-65to150		°C

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	BF420 BF422 V _{(BR)CBO}	I _C =100μA, I _E =0	300 250		V
Collector-emitter breakdown voltage	BF420 BF422 V _{(BR)CEO}	I _C = 1mA , I _B =0	300 250		V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =100μA, I _C =0	5		V
Collector cut-off current	I _{CBO}	V _{CB} =200V, I _E =0		0.01	μ A
Emitter cut-off current	I _{EBO}	V _{EB} =5V, I _C =0		0.05	μ A
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
Transition frequency	f _T	V _{CE} =10V, I _C = 10mA f=100MHz	60		MHz
Feedback capacitance	C _{re}	V _{CE} =30V, I _C =0, f=1MHz		1.6	pF