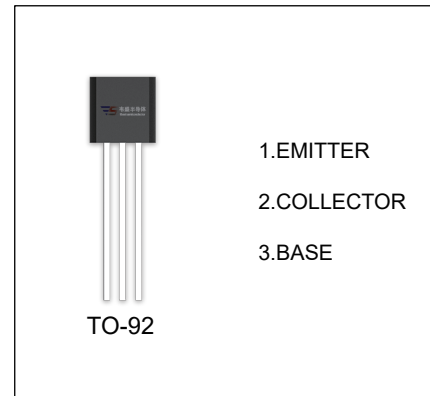


TRANSISTOR (NPN)
BF422BF420

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.


ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
BF420	TO-92	Bulk	1000pcs/Bag
BF420-TA	TO-92	Tape	2000pcs/Box
BF422	TO-92	Bulk	1000pcs/Bag
BF422-TA	TO-92	Tape	2000pcs/Box

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	0.830		W
R _{thja}	Thermal resistance from junction to ambient	151		°C /W
T _J , T _{stg}	Operation Junction and Storage Temperature Range	-55 ~ 150		°C

$T_a=25\text{ }^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	BF420 BF422 $V_{(BR)CBO}$	$I_C=100\mu\text{A}, I_E=0$	300 250		V
Collector-emitter breakdown voltage	BF420 BF422 $V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	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	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$		0.05	μA
DC current gain	h_{FE}	$V_{CE}=20\text{V}, I_C=25\text{mA}$	50		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=30\text{mA}, I_B=5\text{mA}$		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