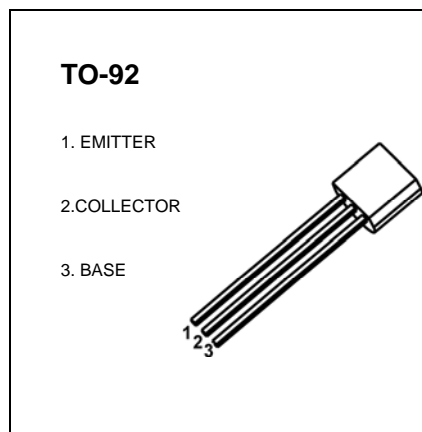


TO-92 Plastic-Encapsulate Transistors

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_a=25°C unless otherwise noted)

Symbol	Parameter	BF421	BF423	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	0.83		W
R _{th j-a}	thermal resistance from junction to ambient	151		°C/W
T _j	junction temperature	150		°C
T _{stg}	Storage Temperature Range	-55~+150		°C

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

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	BF421 BF423	V _{(BR)CBO} I _C =-100μA, I _E =0	-300 -250		V
Collector-emitter breakdown voltage	BF421 BF423	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} =-200 V, I _E =0		-0.01	μA
Emitter cut-off current	BF421 BF423	I _{EBO} V _{EB} =-5V, I _C =0		-0.1 -0.05	μA
DC current gain		h _{FE} V _{CE} =-20V, I _C =-25mA	50		
Collector-emitter saturation voltage	BF421 BF423	V _{CE(sat)} I _C =-20mA, I _B =-2mA 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

TO-92 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	3.300	3.700	0.130	0.146
A1	1.100	1.400	0.043	0.055
b	0.380	0.550	0.015	0.022
c	0.360	0.510	0.014	0.020
D	4.300	4.700	0.169	0.185
D1	3.430		0.135	
E	4.300	4.700	0.169	0.185
e	1.270 TYP		0.050 TYP	
e1	2.440	2.640	0.096	0.104
L	14.100	14.500	0.555	0.571
Φ		1.600		0.063
h	0.000	0.380	0.000	0.015

TO-92 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

NOTICE

JCET reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JCET does not assume any liability arising out of the application or use of any product described herein.

TO-92 PACKAGE TAPEING DIMENSION



Dimiensions are in millimeter								
A1	A	T	P	P0	P2	F1	F2	W
4.5	4.5	3.5	12.7	12.7	6.35	2.5	2.5	18.0
W0	W1	W2	H	H0	D0	t1	t2	ΔP
6.0	9.0	1.0 MAX.	19.0	16.0	4.0	0.4	0.2	0



Package	Box	Box Size(mm)	Carton	Carton Size(mm)
TO-92	2000 pcs	333×162×43	20,000 pcs	350×340×250