

## TO-92 Plastic-Encapsulate Transistors

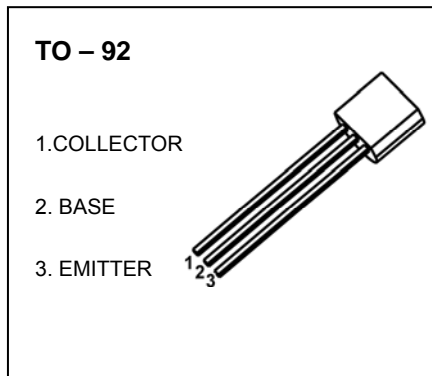
### BF370 TRANSISTOR (NPN)

#### FEATURES

- Low Saturation Medium Current Application
- High Transition Frequency

#### MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V <sub>CB0</sub>	Collector-Base Voltage	40	V
V <sub>CEO</sub>	Collector-Emitter Voltage	15	V
V <sub>EBO</sub>	Emitter-Base Voltage	4.5	V
I <sub>C</sub>	Collector Current	0.1	A
P <sub>C</sub>	Collector Power Dissipation	500	mW
R <sub>θJA</sub>	Thermal Resistance From Junction To Ambient	250	°C/W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55~+150	°C



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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> = 0.1mA, I <sub>E</sub> = 0	40			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> = 1mA, I <sub>B</sub> = 0	15			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> = 100μA, I <sub>C</sub> = 0	4.5			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> = 20V, I <sub>E</sub> = 0			0.4	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = 2V, I <sub>C</sub> = 0			0.1	μA
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> = 1V, I <sub>C</sub> = 10mA	40		200	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = 15mA, I <sub>B</sub> = 1.5mA			0.2	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> = 15mA, I <sub>B</sub> = 1.5mA			1.2	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = 10V, I <sub>C</sub> = 10mA, f = 100 MHz	500			MHz