

## TO-92 Plastic-Encapsulate Transistors

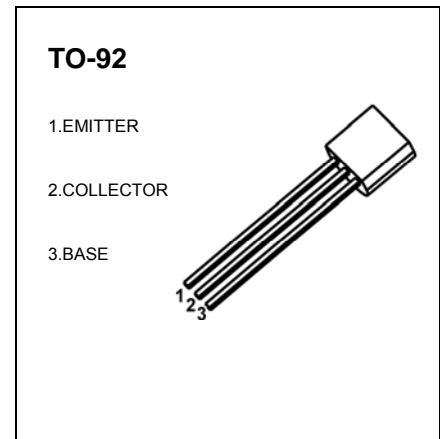
### A1015 TRANSISTOR (PNP)

#### FEATURES

- Power dissipation

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

Symbol	Parameter	Value	Unit
V <sub>CB0</sub>	Collector-Base Voltage	-50	V
V <sub>CE0</sub>	Collector-Emitter Voltage	-50	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
I <sub>c</sub>	Collector Current -Continuous	-150	mA
P <sub>D</sub>	Collector Power Dissipation	400	mW
T <sub>j</sub>	Junction Temperature	125	°C
T <sub>stg</sub>	Storage Temperature	-55-125	°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> = -100μA, I <sub>E</sub> = 0	-50			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> = -0.1mA, I <sub>B</sub> = 0	-50			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> = -50V, I <sub>E</sub> = 0			-0.1	μA
Collector cut-off current	I <sub>CEO</sub>	V <sub>CE</sub> = -50V, I <sub>B</sub> = 0			-0.1	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = -5V, I <sub>C</sub> = 0			-0.1	μA
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> = -6V, I <sub>C</sub> = -2mA	70		400	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = -100mA, I <sub>B</sub> = -10mA			-0.3	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> = -100mA, I <sub>B</sub> = -10mA			-1.1	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = -10V, I <sub>C</sub> = -1mA f = 30MHz	80			MHz
Collector Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -10V, I <sub>E</sub> = 0, f = 1MHz			7	pF
Noise Figure	NF	V <sub>CE</sub> = -6V, I <sub>C</sub> = -0.1mA, f = 1KHz, R <sub>G</sub> = 10K			6	dB

#### CLASSIFICATION OF h<sub>FE</sub>

Rank	O	Y	GR
Range	70-140	120-240	200-400