

## TO-92 Plastic-Encapsulate Transistors

### A92 TRANSISTOR (PNP)

#### FEATURES

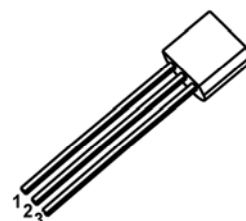
- High voltage

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

Symbol	Parameter	Value	Units
V <sub>CB0</sub>	Collector-Base Voltage	-310	V
V <sub>CE0</sub>	Collector-Emitter Voltage	-305	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
I <sub>c</sub>	Collector Current -Continuous	-200	mA
I <sub>CM</sub>	Collector Current -Pulsed	-500	mA
P <sub>c</sub>	Collector Power Dissipation	625	mW
T <sub>j</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55-150	°C
R <sub>θJA</sub>	Thermal Resistance, Junction to Ambient	200	°C/mW
R <sub>θJC</sub>	Thermal Resistance, Junction to Case	83.3	°C/mW

#### TO-92

- 1.EMITTER
- 2.BASE
- 3.COLLECTOR



#### 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	-310			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =-1mA, I <sub>B</sub> =0	-305			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> = -200 V I <sub>E</sub> =0			-0.25	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = -5 V, I <sub>C</sub> =0			-0.1	μA
DC current gain	h <sub>FE(1)</sub>	V <sub>CE</sub> = -10 V, I <sub>C</sub> =- 1 mA	60			
	h <sub>FE(2)</sub>	V <sub>CE</sub> = -10V, I <sub>C</sub> = -10 mA	80		250	
	h <sub>FE(3)</sub>	V <sub>CE</sub> = -10 V, I <sub>C</sub> = -80 mA	60			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = -20 mA, I <sub>B</sub> = -2 mA			-0.2	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> = -20 mA, I <sub>B</sub> = -2 mA			-0.9	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = -20 V, I <sub>C</sub> = -10 mA f = 30MHz	50			MHz

#### CLASSIFICATION OF h<sub>FE(2)</sub>

Rank	A	B <sub>1</sub>	B <sub>2</sub>	C
Range	80-100	100-150	150-200	200-250