

TO-92 Plastic-Encapsulate Transistors

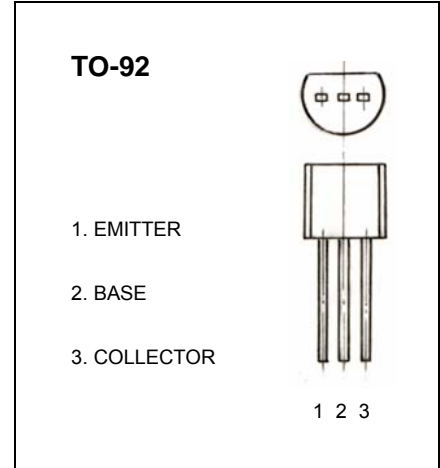
A94 TRANSISTOR (PNP)

FEATURES

High voltage

MAXIMUM RATINGS ($T_A=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CB0}	Collector-Base Voltage	-400	V
V_{CE0}	Collector-Emitter Voltage	-400	V
V_{EB0}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-0.2	A
P_C	Collector Power Dissipation	0.625	W
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55 to +150	$^\circ\text{C}$



ELECTRICAL CHARACTERISTICS ($T_{amb}=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR) CBO}$	$I_C = -100\mu\text{A}, I_E = 0$	-400			V
Collector-emitter breakdown voltage	$V_{(BR) CEO}$	$I_C = -1\text{mA}, I_B = 0$	-400			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}	$V_{CB} = -400\text{V}, I_E = 0$			-0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE} = -400\text{V}, I_B = 0$			-5	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -4\text{V}, I_C = 0$			-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -10\text{V}, I_C = -10\text{mA}$	80		300	
	$h_{FE(2)}$	$V_{CE} = -10\text{V}, I_C = -1\text{mA}$	70			
	$h_{FE(3)}$	$V_{CE} = -10\text{V}, I_C = -100\text{mA}$	60			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -10\text{mA}, I_B = -1\text{mA}$			-0.2	V
	$V_{CE(sat)}$	$I_C = -50\text{mA}, I_B = -5\text{mA}$			-0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -10\text{mA}, I_B = -1\text{mA}$			-0.75	V
Transition frequency	f_T	$V_{CE} = -20\text{V}, I_C = -10\text{mA}$ $f = 30\text{MHz}$	50			MHz

Typical Characteristics

A94

