

TO-92 Plastic-Encapsulate Transistors

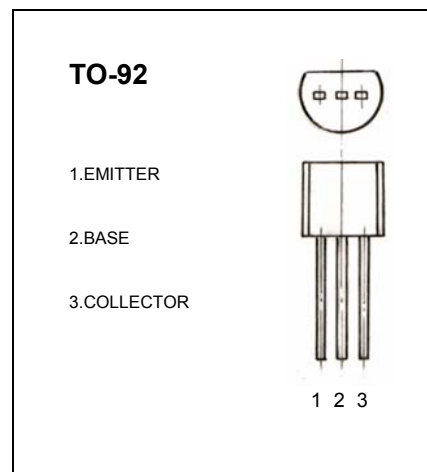
A92 TRANSISTOR (PNP)

FEATURES

High voltage

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

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-300	V
V_{CEO}	Collector-Emitter Voltage	-300	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-500	mA
P_C	Collector Power Dissipation	625	mW
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55-150	$^{\circ}\text{C}$
$R_{\theta JA}$	Thermal Resistance, junction to Ambient	200	$^{\circ}\text{C}/\text{mW}$
$R_{\theta JC}$	Thermal Resistance, unction to Case	83.3	$^{\circ}\text{C}/\text{mW}$



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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}$, $I_E=0$	-300			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}$, $I_B=0$	-300			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}	$V_{CB}= -200\text{ V}$ $I_E=0$			-0.25	μA
Emitter cut-off current	I_{EBO}	$V_{EB}= -5\text{ V}$, $I_C=0$			-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}= -10\text{ V}$, $I_C=-1\text{ mA}$	60			
	$h_{FE(2)}$	$V_{CE}= -10\text{V}$, $I_C= -10\text{ mA}$	80		250	
	$h_{FE(3)}$	$V_{CE}= -10\text{ V}$, $I_C= -80\text{ mA}$	60			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C= -20\text{ mA}$, $I_B= -2\text{ mA}$			-0.2	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C= -20\text{ mA}$, $I_B= -2\text{ mA}$			-0.9	V
Transition frequency	f_T	$V_{CE}= -20\text{ V}$, $I_C= -10\text{ mA}$ $f = 30\text{MHz}$	50			MHz

CLASSIFICATION OF $h_{FE(2)}$

Rank	A	B ₁	B ₂	C
Range	80-100	100-150	150-200	200-250

Typical Characteristics

A92

