

TO-92 Plastic-Encapsulate Transistors

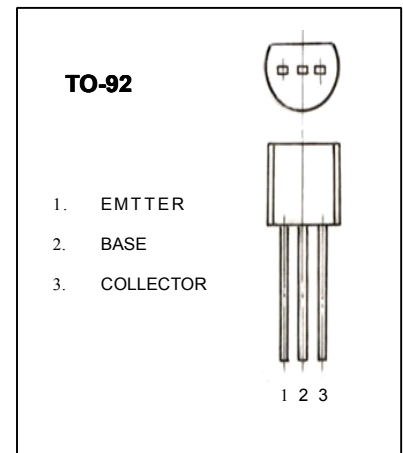
A92 TRANSISTOR (PNP)

FEATURES

High voltage

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

Symbol	Parameter	Value	Units
V_{CB0}	Collector-Base Voltage	-300	V
V_{CE0}	Collector-Emitter Voltage	-300	V
V_{EB0}	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