



A92 TRANSISTOR (PNP)

FEATURES

- High voltage



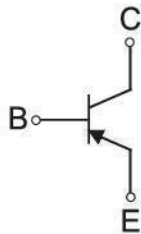
TO-92

1.EMITTER

2.BASE

3.COLLECTOR

Equivalent Circuit



MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Units
V _{CBO}	Collector-Base Voltage	-310	V
V _{CEO}	Collector-Emitter Voltage	-305	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current -Continuous	-200	mA
I _{CM}	Collector Current - Pulsed	-500	mA
P _C	Collector Power Dissipation	625	mW
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~150	°C
R _{θJA}	Thermal Resistance, Junction to Ambient	200	°C /mW
R _{θJC}	Thermal Resistance, Junction to Case	83.3	°C /mW

ELECTRICAL CHARACTERISTICS

$T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}, I_E=0$	-310			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}, I_B=0$	-305			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	C
Range	80-100	100-200	200-250

Typical Characteristics

