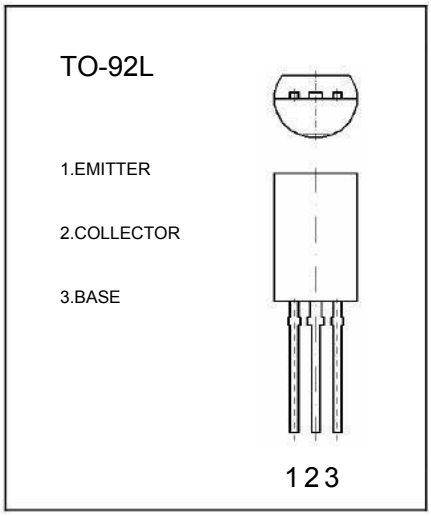
TO-92L Plastic-Encapsulate Transistors

A1972 TRANSISTOR (PNP)



FEATURES

Low collector to emitter saturation voltage $V_{CE(sat)}$.

MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

Symbol	Parameter			Units
V_{CBO}	Collector-Base Voltage		-400	V
V_{CEO}	Collector-Emitter Voltage		-400	V
V_{EBO}	Emitter-Base Voltage	-7		V
I_C	Collector Current –Continuous	-0.5		A
P_C	Collector Power Dissipation	0.9		W
T_J	Junction Temperature	150		℃
T_{stg}	Storage Temperature	-55-150		℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-10mA , I_B=0	-400			V
Collector cut-off current	I_{CBO}	V_{CB}=-400V, I_E=0			-10	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-7V， I_C=0			-1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=-5V, I_C=-20mA	140		450	
DC current gain	$h_{FE(2)}$	V_{CE}=-5V, I_C=-100mA	140		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-100mA, I_B=-10mA		-0.4	-1.0	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=-100mA, I_B=-10mA		-0.76	-0.9	V
Transition frequency	f_T	V_{CE}=-5V, I_C=-50mA		35		MHz

CLASSIFICATION OF $h_{FE(1)}$

Rank	1	2	3
Range	140-2000	200--300	300-400