



TO-92L Plastic-Encapsulate Transistors

KTC1006

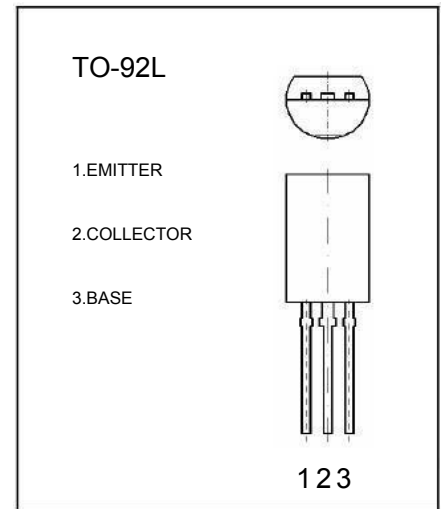
TRANSISTOR (NPN)

FEATURES

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

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

Symbol	Parameter		Units
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	80	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current –Continuous	0.8	A
P_C	Collector Power Dissipation	1.0	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55-150	$^\circ\text{C}$



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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector cut-off current	I_{CBO}	$V_{CB}=60V, I_B=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5V, I_C=0$			0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=2V, I_C=150\text{mA}$	100			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500\text{mA}, I_B=20\text{mA}$			0.7	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=500\text{mA}, V_{CE}=2V$		0.9		V
Transition frequency	f_T	$V_{CE}=10V, I_C=100\text{mA}$		150		MHz

CLASSIFICATION OF $h_{FE(1)}$

Rank	1	2	3
Range	100-150	120--200	200-300