



TO-92L Plastic-Encapsulate Transistors

KTC3227

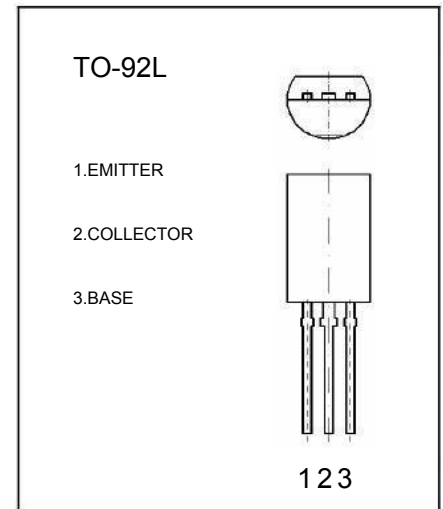
TRANSISTOR (NPN)

FEATURES

Low collector to emitter saturation voltage $V_{CE(sat)}$.
Complementary pair with KTA1274

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	0.4	A
P_C	Collector Power Dissipation	1	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-base breakdown voltage	$V_{(BR)CBO}$	$I_C=1\text{mA}, I_E=0$	80			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=5\text{mA}, I_B=0$	80			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=1\text{mA}, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=50\text{V}, I_E=0$			0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=2\text{V}, I_C=50\text{mA}$	70		240	
DC current gain	$h_{FE(2)}$	$V_{CE}=2\text{V}, I_C=200\text{mA}$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=200\text{mA}, I_B=20\text{mA}$			0.4	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=5\text{mA}, V_{CE}=2\text{V}$	0.55		0.8	V
Transition frequency	f_T	$V_{CB}=10\text{V}, I_C=10\text{mA}$		100		MHz

CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y
Range	70-140	120-240

