

TO-92L Plastic-Encapsulate Transistors

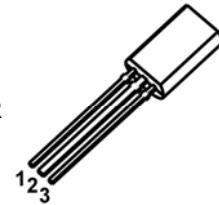
KTC3206 TRANSISTOR (NPN)

FEATURE

- High Breakdown Voltage : $V_{CEO}=150V(\text{Min.})$
- Low Output Capacitance : $C_{ob}=5.0pF(\text{Max.})$
- High Transition Frequency : $f_T=120MHz(\text{Typ.})$.

TO-92L

1. EMITTER
2. COLLECTOR
3. BASE



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

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	200	V
V_{CEO}	Collector-Emitter Voltage	150	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	50	mA
P_C	Collector Power Dissipation	1	W
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55-150	$^\circ\text{C}$

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V(BR)_{CBO}$	$I_C=100\mu A, I_E=0$	200			V
Collector-emitter breakdown voltage	$V(BR)_{CEO}$	$I_C=1mA, I_B=0$	150			V
Emitter-base breakdown voltage	$V(BR)_{EBO}$	$I_E=100\mu A, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=200V, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5V, I_C=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=5V, I_C=10mA$	70		240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=1mA$			0.5	V
Base-emitter voltage	$V_{BE(sat)}$	$I_C=10mA, I_B=1mA$			1	V
Transition frequency	f_T	$V_{CE}=30V, I_C=10mA$		120		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$			5.0	pF

CLASSIFICATION OF h_{FE}

Rank	O	Y
Range	70-140	120-240