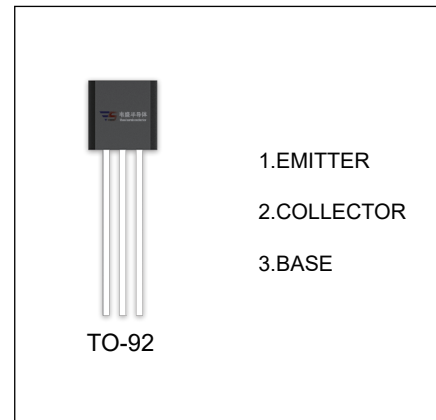


KTC3197 TRANSISTOR (NPN)

FEATURES

- High Gain: $G_{pe}=33\text{dB(Typ)}$ ($f=45\text{MHz}$).
- Good linearity of h_{FE}



ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
KTC3197	TO-92	Bulk	1000pcs/Bag
KTC3197-TA	TO-92	Tape	2000pcs/Box

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

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	30	V
V_{CEO}	Collector-Emitter Voltage	25	V
V_{EBO}	Emitter-Base Voltage	4	V
I_C	Collector Current -Continuous	50	mA
P_C	Collector power dissipation	625	mW
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55-150	$^\circ\text{C}$

T_a=25 °C unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=1mA, I_E=0$	30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=1mA, I_C=0$	4			V
Collector cut-off current	I_{CBO}	$V_{CB}=30V, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=3V, I_C=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=12.5V, I_C=12.5mA$	20		200	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=15mA, I_B=1.5mA$			0.2	V
Base-Emitter saturation voltage	$V_{BE(sat)}$	$I_C=15mA, I_B=1.5mA$			1.5	V
Collector output capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	0.8		2	pF
Collector-base time constant	$C_{c.rbb}$	$V_{CB}=10V, I_E=-1mA, f=30MHz$			25	pS
Transition frequency	f_T	$V_{CE}=12.5V, I_C=12.5mA$	300			MHz
Power gain	G_{pe}	$V_{CE}=12.5V, I_E=12.5mA, f=45MHz$	28		36	dB