TO-92 Plastic-Encapsulate Transistors

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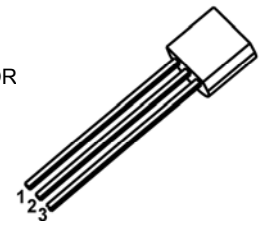
1. EMITTER
2. COLLECTOR
3. BASE



KTC3197 TRANSISTOR (NPN)

FEATURES

- High Gain: Gpe=33dB(Typ) (f=45MHZ).
- Good linearity of h_{FE}

MAXIMUM RATINGS (T_a=25℃ 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	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55-150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ 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=1MH_Z	0.8		2	pF
Collector-base time constant	Cc.r_{bb}	V_{CB}=10V,I_E=-1mA, f=30MH_Z			25	pS
Transition frequency	f_T	V_{CE}=12.5V,I_C=12.5mA	300			MH_Z
Power gain	Gpe	V_{CE}=12.5V,I_E=12.5mA, f=45MH_Z	28		36	dB