

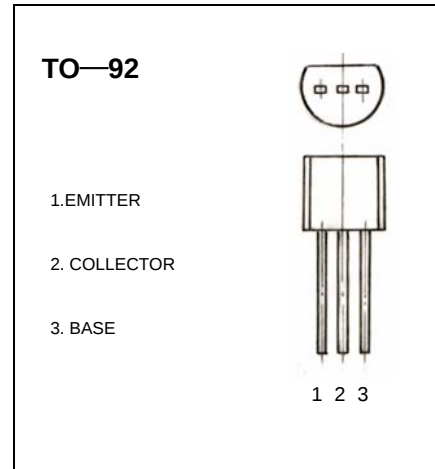


TO-92 Plastic-Encapsulate Transistors

KTC3192 TRANSISTOR (NPN)

FEATURE

- High power gain : $G_{pe}=29\text{dB}(\text{Typ})(f=10.7\text{MHz})$



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

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	35	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	4	V
I_C	Collector Current -Continuous	50	mA
P_C	Collector Dissipation	625	mW
T_J, T_{stg}	Junction and 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	$V(BR)_{CBO}$	$I_C=100\mu\text{A}$, $I_E=0$	35			V
Collector-emitter breakdown voltage	$V(BR)_{CEO}$	$I_C=1\text{mA}$, $I_B=0$	30			V
Emitter-base breakdown voltage	$V(BR)_{EBO}$	$I_E=100\mu\text{A}$, $I_C=0$	4			V
Collector cut-off current	I_{CBO}	$V_{CB}=35\text{V}$, $I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=4\text{V}$, $I_C=0$			1.0	μA
DC current gain	h_{FE}	$V_{CE}=12\text{V}$, $I_C=2\text{mA}$	40		240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=10\text{mA}$, $I_B=1\text{mA}$			0.4	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=10\text{mA}$, $I_B=1\text{mA}$			1.0	V
Transition frequency	f_T	$V_{CE}=10\text{V}$, $I_C=1\text{mA}$	100			MHz
Collector output capacitance	C_{ob}	$V_{CB}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$	1.4		3.2	pF
Collector-base time constant	$C_c, r_{bb'}$	$V_{CE}=10\text{V}$, $I_C=1\text{mA}$, $f=30\text{MHz}$	10		50	pS
Power gain	G_{pe}	$V_{CC}=6\text{V}$, $I_C=1\text{mA}$, $f=10.7\text{MHz}$	27		33	dB

CLASSIFICATION OF $h_{FE(1)}$

Rank	R	O	Y
Range	40-80	70-140	120-240