

TO-92 Plastic-Encapsulate Transistors

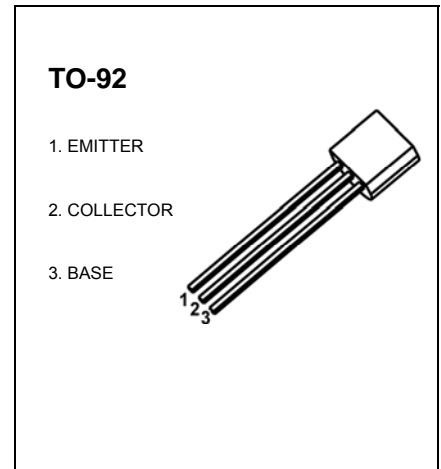
KTC3202 TRANSISTOR (NPN)

FEATURES

- General Purpose Application Switching Application

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	35	V
V _{CEO}	Collector-Emitter Voltage	30	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current -Continuous	500	mA
P _C	Collector Power Dissipation	625	mW
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55-150	°C



ELECTRICAL CHARACTERISTICS(T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-BASE breakdown voltage	V _{(BR)CBO}	I _C = 0.1mA, I _B =0	35			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = 1mA, I _B =0	30			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = 0.1mA, I _C =0	5			V
Collector cut-off current	I _{CBO}	V _{CB} = 35V, 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(1)}	V _{CE} = 1V, I _C = 100mA	70		400	
	h _{FE(2)}	V _{CE} = 6V, I _C = 400mA	25			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =100mA, I _B = 10mA			0.25	V
Base-Emitter Saturation Voltage	V _{BE}	V _{CE} =1V, I _C = 100mA			1.0	V
Transition frequency	f _T	V _{CE} = 6V, I _C = 20mA		300		MHz
Collector Output Capacitance	C _{ob}	V _{CB} = 6V, I _E = 0, f=1 MHz		7.0		pF

CLASSIFICATION OF h_{FE}

Rank	O	Y	GR
Range h _{FE(1)}	70-140	120-240	
Range h _{FE(2)}	25	40	