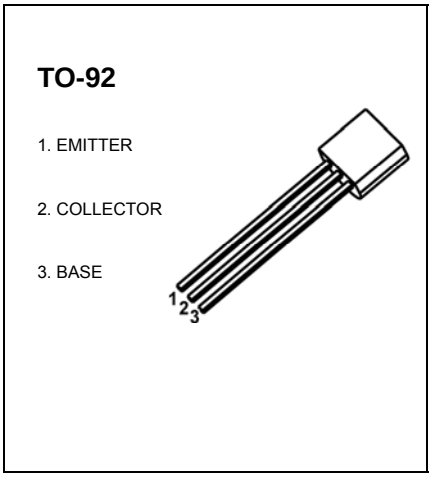
TIGER ELECTRONIC CO.,LTD

TO-92 Plastic-Encapsulate Transistors

KTC3202 TRANSISTOR (NPN)



FEATURES

- General Purpose Application Switching Application

MAXIMUM RATINGS (T_a=25℃ 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	℃
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 = 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	

A,June,2011