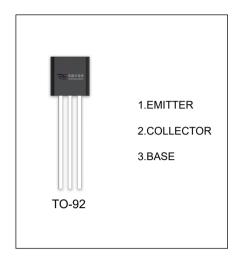


## KTC3202 TRANSISTOR (NPN)

### **FEATURES**

General Purpose Application Switching Application



#### **ORDERING INFORMATION**

Part Number	Package	Packing Method	Pack Quantity
KTC3202	TO-92	Bulk	1000pcs/Bag
KTC3202-TA	TO-92	Tape	2000pcs/Box

### MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V <sub>CBO</sub>	Collector-Base Voltage	35	V
V <sub>CEO</sub>	Collector-Emitter Voltage	30	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
Ic	Collector Current -Continuous	0.5	A
P <sub>D</sub>	Collector Power Dissipation	625	mW
R <sub>θ JA</sub>	Thermal Resistance from Junction to Ambient	200	°C /W
T <sub>J</sub> ,T <sub>stg</sub>	Operation Junction and Storage Temperature Range	-55~+150	°C



# $T_a$ =25 $^{\circ}$ C unless otherwise specified

Parameter	Symbol	Test conditions	Test conditions Min Typ		Max	Unit
Collector-BASE breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> = 0.1mA, I <sub>B</sub> =0	35			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> = 1mA, I <sub>B</sub> =0	30			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> = 0.1mA, I <sub>C</sub> =0 5				V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> = 35V, I <sub>E</sub> =0			0.1	μА
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = 5V, I <sub>C</sub> =0			0.1	μА
DC coursest sein	h <sub>FE(1)</sub>	V <sub>CE</sub> = 1V, I <sub>C</sub> = 100mA	70		400	
DC current gain	h <sub>FE(2)</sub>	V <sub>CE</sub> = 6V, I <sub>C</sub> = 400mA	25			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =100mA, I <sub>B</sub> = 10mA 0.25		0.25	V	
Base-Emitter Saturation Voltage	V <sub>BE</sub>	V <sub>CE</sub> =1V, I <sub>C</sub> = 100mA 1.0		1.0	V	
Transition frequency	f⊤	V <sub>CE</sub> = 6V, I <sub>C</sub> = 20mA 300			MHz	
Collector Output Capacitance	C <sub>ob</sub>	ob V <sub>CB</sub> = 6V, I <sub>E</sub> = 0,f=1 MHz 7.0			pF	

## CLASSIFICATION OF $h_{\text{FE}}$

Rank	0	Υ	GR
Range h <sub>FE(1)</sub>	70-140	120-240	
Range h <sub>FE(2)</sub>	25	40	