

# 深圳市晶泰源电子有限公司

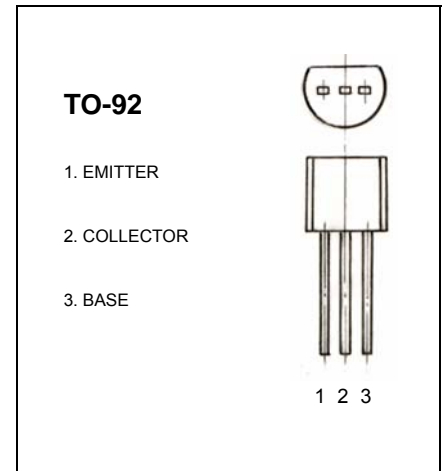
## KTC3202 TRANSISTOR (NPN)

### FEATURES

General purpose application switching application

### 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	5	V
$I_C$	Collector Current -Continuous	500	mA
$P_C$	Collector Power Dissipation	625	mW
$T_J$	Junction Temperature	150	$^{\circ}\text{C}$
$T_{stg}$	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	$V_{(BR)CBO}$	$I_C = 0.1\text{mA}, I_B=0$	35			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1\text{mA}, I_B=0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 0.1\text{mA}, I_C=0$	5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}= 35\text{V}, I_E=0$			0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}= 5\text{V}, I_C=0$			0.1	$\mu\text{A}$
DC current gain	$h_{FE(1)}$	$V_{CE}= 1\text{V}, I_C= 100\text{mA}$	70		400	
	$h_{FE(2)}$	$V_{CE}= 6\text{V}, I_C= 400\text{mA}$	25			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=100\text{mA}, I_B= 10\text{mA}$			0.25	V
Base-Emitter Saturation Voltage	$V_{BE}$	$V_{CE}=1\text{V}, I_C= 100\text{mA}$			1.0	V
Transition frequency	$f_T$	$V_{CE}= 6\text{V}, I_C= 20\text{mA}$		300		MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}= 6\text{V}, I_E= 0, f=1\text{ MHz}$		7.0		pF

### CLASSIFICATION OF $h_{FE}$

Rank		Y	
Range $h_{FE(1)}$		120-240	