

## TO-92S Plastic-Encapsulate Transistors

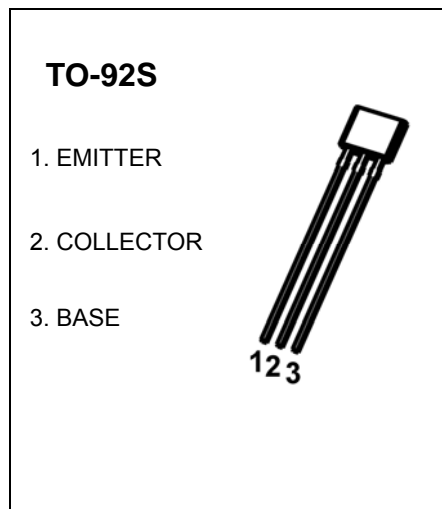
### KTC3195 TRANSISTOR (NPN)

#### FEATURES

- Small reverse transfer capacitance
- Low noise Figure

#### MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V <sub>CB0</sub>	Collector-Base Voltage	40	V
V <sub>CEO</sub>	Collector-Emitter Voltage	30	V
V <sub>EBO</sub>	Emitter-Base Voltage	4	V
I <sub>C</sub>	Collector Current -Continuous	20	mA
P <sub>C</sub>	Collector Power Dissipation	400	mW
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55-150	°C



#### ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =100μA, I <sub>E</sub> =0	40			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> =100μA, I <sub>C</sub> =0	4			V
Collector cut-off current	I <sub>CB0</sub>	V <sub>CB</sub> =40V, I <sub>E</sub> =0			0.5	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =4V, I <sub>C</sub> =0			0.5	μA
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> =6V, I <sub>C</sub> =1mA	40		200	
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =6V, I <sub>C</sub> =1mA	300	550		MHz
Reverse Transfer capacitance	C <sub>re</sub>	V <sub>CB</sub> =6V, I <sub>E</sub> =0, f=1MHz		0.7		pF
Noise figure	NF	V <sub>CE</sub> =6V, I <sub>C</sub> =1mA, f=100MHz		2.5	5	dB
Power Gain	G <sub>pe</sub>			18		dB

#### CLASSIFICATION OF h<sub>FE</sub>

Rank	R	O	Y
Range	40-80	70-140	100-200