

## TO-92 Plastic-Encapsulate Transistors

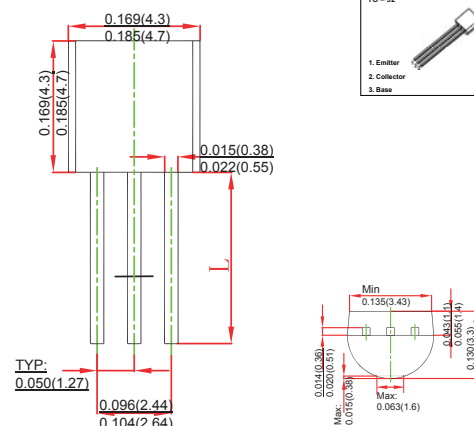
### FEATURES

- Excellent hFE Linearity
- Low Noise
- Complementary to KTC3198
- TRANSISTOR (PNP)

### MECHANICAL DATA

- Case style:TO-92 molded plastic
- Mounting position:any

### TO-92



## MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Symbol	Parameter	Value	Unit
V <sub>CB0</sub>	Collector-Base Voltage	-50	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-50	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
I <sub>C</sub>	Collector Current -Continuous	-150	mA
P <sub>D</sub>	Collector Power Dissipation	625	mW
R <sub>θJA</sub>	Thermal Resistance from Junction to Ambient	200	°C /W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55~+150	°C

## ELECTRICAL CHARACTERISTICS Ta =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	-50			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =-1mA, I <sub>B</sub> =0	-50			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =-100μA, I <sub>C</sub> =0	-5			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =-50V, I <sub>E</sub> =0			-0.1	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =-5V, I <sub>C</sub> =0			-0.1	μA
DC current gain	h <sub>FE(1)</sub>	V <sub>CE</sub> =-6V, I <sub>C</sub> =-2mA	70		400	
	h <sub>FE(2)</sub>	V <sub>CE</sub> =-6V, I <sub>C</sub> =-150mA	25			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =-100mA, I <sub>B</sub> =-10mA			-0.3	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =-100mA, I <sub>B</sub> =-10mA			-1.1	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =-10V, I <sub>C</sub> =-1mA	80			MHz
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> =-10V, I <sub>E</sub> =0, f=1MHz			7	pF
Noise figure	NF	V <sub>CE</sub> =-6V, I <sub>C</sub> =-0.1mA, f=1KHZ, R <sub>g</sub> =10KΩ			10	dB

### CLASSIFICATION OF h<sub>FE(1)</sub>

Rank	O	Y	GR
Range	70-140	120-240	200-400