

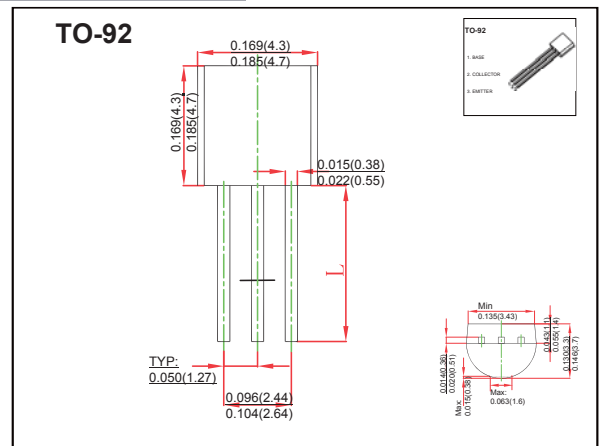
## TO-92 Plastic-Encapsulate Transistors

### Features

- power switching applications
- TRANSISTOR (NPN)

### MECHANICAL DATA

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



## MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Symbl	Parameter	Value	Unit
V <sub>CB0</sub>	Collector-Base Voltage	600	V
V <sub>CEO</sub>	Collector-Emitter Voltage	400	V
V <sub>EBO</sub>	Emitter-Base Voltage	9	V
I <sub>C</sub>	Collector Current-Continuous	0.2	A
P <sub>C</sub>	Collector Power Dissipation	0.75	W
T <sub>j</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55-150	°C

## Electrical Specification(T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V(BR) <sub>CB0</sub>	I <sub>C</sub> = 100uA, I <sub>E</sub> =0	600			V
Collector-emitter breakdown voltage *	V(BR) <sub>CEO</sub>	I <sub>C</sub> = 1mA, I <sub>B</sub> =0	400			V
Emitter-base breakdown voltage	V(BR) <sub>EBO</sub>	I <sub>E</sub> = 100uA, I <sub>C</sub> =0	9			V
Collector cut-off current	I <sub>CB0</sub>	V <sub>CB</sub> =600V, I <sub>E</sub> =0			10	uA
Collector cut-off current	I <sub>CEO</sub>	V <sub>CE</sub> = 400V, I <sub>B</sub> =0			10	uA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =9V, I <sub>C</sub> =0			10	uA
	h <sub>FE(2)</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =20mA	10			
	h <sub>FE(3)</sub>	V <sub>CE</sub> = 20V, I <sub>C</sub> =20mA	10		40	
	h <sub>FE(4)</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =0.25mA	5			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =50mA, I <sub>B</sub> =10mA			1	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =50mA, I <sub>B</sub> =10mA			1.2	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =20V, I <sub>C</sub> =20mA, f=1MHZ	8			MHZ
Fall time	t <sub>f</sub>	I <sub>C</sub> =0.1A, UI9600			1	us
Storage time	t <sub>s</sub>				3	us