

## TO-92 Plastic-Encapsulate Transistors

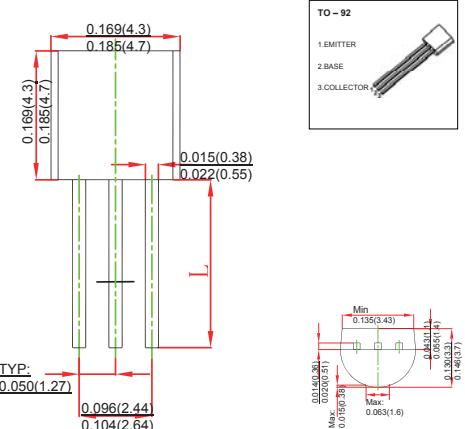
### FEATURES

- PNP TRANSISTOR

### 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
VCBO	Collector-Base Voltage	-60	V
VCEO	Collector-Emitter Voltage	-40	V
VEBO	Emitter-Base Voltage	-5	V
IC	Collector Current -Continuous	-0.6	A
PC	Collector Dissipation	0.625	W
TJ	Junction Temperature	150	°C
Tstg	Storage Temperature	-55~+150	°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> = 10uA, I <sub>E</sub> = 0	-60			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> = 10 m A , I <sub>B</sub> = 0	-30			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> = 10 μA, I <sub>C</sub> = 0	- 5			V
Collector cutoff current	I <sub>CBO</sub>	V <sub>CB</sub> = -50 V, I <sub>E</sub> = 0			-10	nA
Emitter cutoff current	I <sub>EBO</sub>	V <sub>EB</sub> = - 3 . 0 V , I <sub>C</sub> = 0			-10	nA
DC current gain	$h_{FE}$	IC =-0.1mA, VCE =-10V IC =-150mA, VCE = -10 V IC =-500mA, VCE =-10V	52 100 3 2			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	IC =-150mA, IB =-15 mA IC =-500mA, IB =-50 mA			-0.4 -0.67	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	IC =-150mA, IB =-15mA Ic =-500 mA, Ib = - 5 0 m A			-1.0 -1.2	V
Transiston frequency	f <sub>r</sub>	V <sub>CE</sub> =-20V,I <sub>C</sub> =-50mA,f=100MHz	200			MHz
Delay time	T <sub>d</sub>	V <sub>CC</sub> =-30V,			10	ns
Rise time	T <sub>r</sub>	IC=-150mA,I <sub>B1</sub> =-15mA			25	ns
Storage time	T <sub>s</sub>	V <sub>CC</sub> =-6V,IC=-150mA			225	ns
Fall time	T <sub>f</sub>	I <sub>B1</sub> =I <sub>B2</sub> =-15mA			60	ns

### CLASSIFICATION OF $h_{FE(2)}$

Rank	L	H
Range	100-200	200-300

# RATINGS AND CHARACTERISTIC CURVES

## Typical Characteristics

