

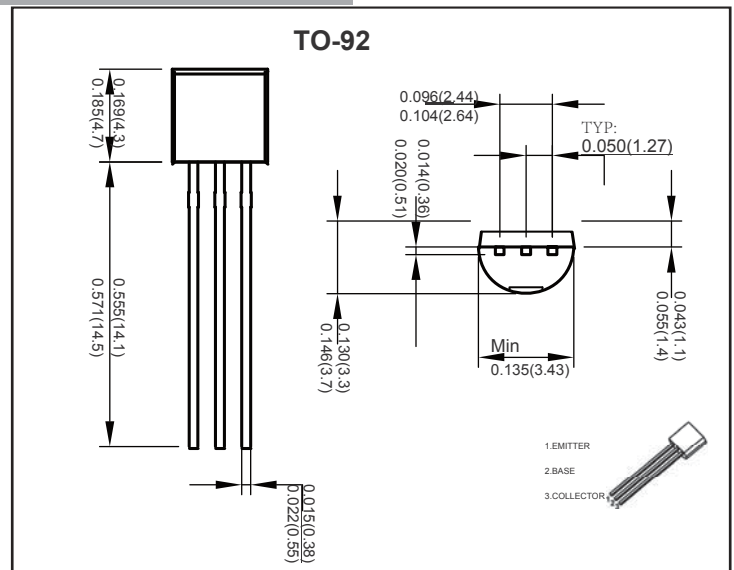
TO-92 Plastic-Encapsulate Transistors

Features

- Switching and amplification in high voltage
- Applications such as telephony
- Low current(max. 600mA)
- High voltage(max. 150V)
- PNP General Purpose Amplifier

MECHANICAL DATA

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



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-160	V
V_{CEO}	Collector-Emitter Voltage	-150	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-0.6	A
P_C	Collector Power Dissipation	625	mW
R_{KJA}	Thermal Resistance From Junction To Ambient	200	°C / W
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55~+150	°C

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -0.1mA, I_E = 0$	-160			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1mA, I_B = 0$	-150			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -0.01mA, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -120V, I_E = 0$			-50	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = -3V, I_C = 0$			-50	nA
DC current gain	$h_{FE(1)}$	$V_{CE} = -5V, I_C = -1mA$	80			
	$h_{FE(2)}$	$V_{CE} = -5V, I_C = -10mA$	100		300	
	$h_{FE(3)}$	$V_{CE} = -5V, I_C = -50mA$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -50mA, I_B = -5mA$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -50mA, I_B = -5mA$			-1	V
Transition frequency	f_T	$V_{CE} = -5V, I_C = -10mA, f = 30MHz$	100		300	

*Pulse test: pulse width $\leq 300\mu s$, duty cycle $\leq 2.0\%$.

CLASSIFICATION OF $h_{FE(2)}$

RANK	A	B	C
RANGE	100-150	150-200	200-300

RATINGS AND CHARACTERISTIC CURVES

Typical Characteristics

