

TO-92 Plastic-Encapsulate Transistors

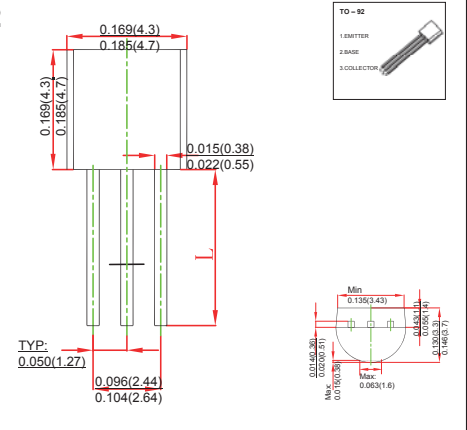
Features

- 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

TO-92



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	-160	V
Collector-emitter voltage	V_{CEO}	-150	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current-continuous	I_C	-600	mA
Collector Power Dissipation	P_C	625	mW
Junction and storage temperature	T_J, T_{stg}	-55 to +150	°C

PACKAGE INFORMATION

Device	Package	Shipping
2N5401	TO-92	2000/Tape&Reel

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100 \mu A, I_E = 0$	-160			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1.0 mA, I_B = 0$	-150			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10 \mu A, I_C = 0$	-5			V
Collector cutoff current	I_{CBO}	$V_{CB} = -120 V, I_E = 0$			-50	nA
Emitter cutoff current	I_{EBO}	$V_{EB} = -3.0 V, I_C = 0$			-50	nA
DC current gain	h_{FE}	$I_C = -1.0 mA, V_{CE} = -5 V$	50			
		$I_C = -10 mA, V_{CE} = -5 V$	60		240	
		$I_C = -50 mA, V_{CE} = -5 V$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -50 mA, I_B = -5.0 mA$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -50 mA, I_B = -5.0 mA$			-1.0	V
Transistor frequency	f_T	$V_{CE} = -5V, I_C = -10mA, f = 30MHz$	100		300	MHz