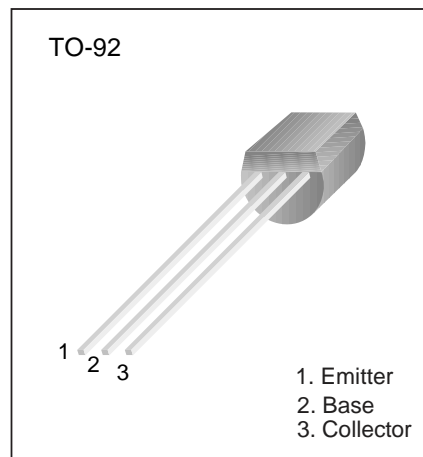


# 2N5401

### ■ Features

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



### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V <sub>CB0</sub>	-160	V
Collector-emitter voltage	V <sub>CEO</sub>	-150	V
Emitter-base voltage	V <sub>EBO</sub>	-5	V
Collector current-continuous	I <sub>c</sub>	-600	mA
Collector Power Dissipation	P <sub>c</sub>	625	mW
Junction and storage temperature	T <sub>J</sub> , T <sub>stg</sub>	-55 to +150	°C

### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>c</sub> = -100 μA, I <sub>E</sub> = 0	-160			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>c</sub> = -1.0 mA, I <sub>B</sub> = 0	-150			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> = -120 V, I <sub>E</sub> = 0			-50	nA
Emitter cutoff current	I <sub>EBO</sub>	V <sub>EB</sub> = -3.0 V, I <sub>c</sub> = 0			-50	nA
DC current gain	h <sub>FE</sub>	I <sub>c</sub> = -1.0 mA, V <sub>CE</sub> = -5 V	50			
		I <sub>c</sub> = -10 mA, V <sub>CE</sub> = -5 V	60		240	
		I <sub>c</sub> = -50 mA, V <sub>CE</sub> = -5 V	50			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>c</sub> = -50 mA, I <sub>B</sub> = -5.0 mA			-0.5	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>c</sub> = -50 mA, I <sub>B</sub> = -5.0 mA			-1.0	V
Transistor frequency	f <sub>T</sub>	V <sub>CE</sub> = -5V, I <sub>c</sub> = -10mA, f = 30MHz	100		300	MHz