

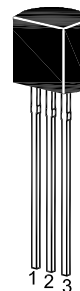
2N5400 / 2N5401

PNP Silicon Epitaxial Planar Transistors

for general purpose, high voltage amplifier applications.

As complementary types the NPN transistors 2N5550 and 2N5551 are recommended.

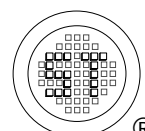
On special request, these transistors can be manufactured in different pin configurations.



1. Emitter 2. Base 3. Collector
TO-92 Plastic Package

Absolute Maximum Ratings ($T_a = 25\text{ }^{\circ}\text{C}$)

Parameter		Symbol	Value	Unit
Collector Base Voltage	2N5400	$-V_{CBO}$	130	V
	2N5401		160	
Collector Emitter Voltage	2N5400	$-V_{CEO}$	120	V
	2N5401		150	
Emitter Base Voltage		$-V_{EBO}$	5	V
Collector Current		$-I_C$	600	mA
Power Dissipation		P_{tot}	625	mW
Junction Temperature		T_j	150	$^{\circ}\text{C}$
Storage Temperature Range		T_{stg}	- 55 to + 150	$^{\circ}\text{C}$



2N5400 / 2N5401

Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Parameter		Symbol	Min.	Max.	Unit
DC Current Gain at $-V_{CE} = 5\text{ V}$, $-I_C = 1\text{ mA}$ at $-V_{CE} = 5\text{ V}$, $-I_C = 10\text{ mA}$ at $-V_{CE} = 5\text{ V}$, $-I_C = 50\text{ mA}$	2N5400	h_{FE}	30	-	-
	2N5401	h_{FE}	50	-	-
	2N5400	h_{FE}	40	180	-
	2N5401	h_{FE}	60	240	-
	2N5400	h_{FE}	40	-	-
	2N5401	h_{FE}	50	-	-
Collector Base Cutoff Current at $-V_{CB} = 100\text{ V}$ at $-V_{CB} = 120\text{ V}$	2N5400	$-I_{CBO}$	-	100	nA
	2N5401		-	50	
Emitter Base Cutoff Current at $-V_{EB} = 3\text{ V}$		$-I_{EBO}$	-	50	nA
Collector Base Breakdown Voltage at $-I_C = 100\text{ }\mu\text{A}$	2N5400	$-V_{(BR)CBO}$	130	-	V
	2N5401		160	-	
Collector Emitter Breakdown Voltage at $-I_C = 1\text{ mA}$	2N5400	$-V_{(BR)CEO}$	120	-	V
	2N5401		150	-	
Emitter Base Breakdown Voltage at $-I_E = 10\text{ }\mu\text{A}$		$-V_{(BR)EBO}$	5	-	V
Collector Emitter Saturation Voltage at $-I_C = 10\text{ mA}$, $-I_B = 1\text{ mA}$ at $-I_C = 50\text{ mA}$, $-I_B = 5\text{ mA}$		$-V_{CE(sat)}$	-	0.2	V
			-	0.5	
Base Emitter Saturation Voltage at $-I_C = 10\text{ mA}$, $-I_B = 1\text{ mA}$ at $-I_C = 50\text{ mA}$, $-I_B = 5\text{ mA}$		$-V_{BE(sat)}$	-	1	V
			-	1	
Gain Bandwidth Product at $-V_{CE} = 10\text{ V}$, $-I_C = 10\text{ mA}$, $f = 100\text{ MHz}$		f_T	100	400	MHz
Collector Output Capacitance at $-V_{CB} = 10\text{ V}$, $f = 1\text{ MHz}$		C_{ob}	-	6	pF

