



ShenzhenTaimaoTechnology Co.,Ltd.
TO-92 Plastic-Encapsulate Transistors

2N5401 TRANSISTOR (PNP)

FEATURES

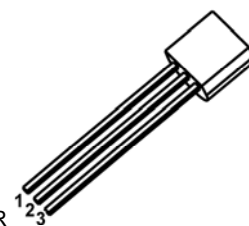
- Switching and Amplification in High Voltage
- Applications such as Telephony
- Low Current
- High Voltage

TO - 92

1. EMITTER

2. BASE

3. COLLECTOR



MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ 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
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	200	$^{\circ}\text{C/W}$
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -0.1\text{mA}, I_E = 0$	-160			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}, I_B = 0$	-150			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -0.01\text{mA}, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -120\text{V}, I_E = 0$			-50	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = -3\text{V}, I_C = 0$			-50	nA
DC current gain	h_{FE}	$V_{CE} = -5\text{V}, I_C = -1\text{mA}$	50			
		$V_{CE} = -5\text{V}, I_C = -10\text{mA}$	60		300	
		$V_{CE} = -5\text{V}, I_C = -50\text{mA}$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -50\text{mA}, I_B = -5\text{mA}$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -50\text{mA}, I_B = -5\text{mA}$			-1	V
Transition frequency	f_T	$V_{CE} = -5\text{V}, I_C = -10\text{mA}, f = 30\text{MHz}$	100		300	MHz

Typical Characteristics

2N5401

