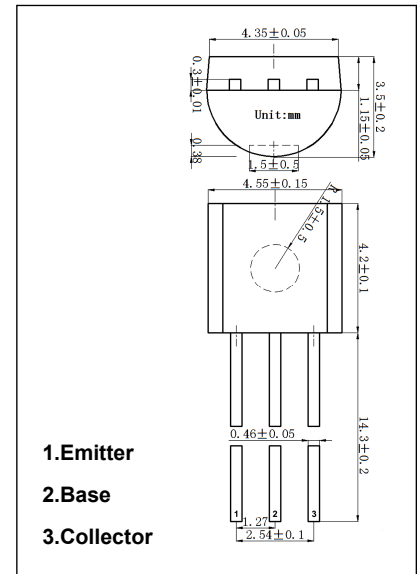


TO-92 Plastic-Encapsulate Transistors

2N5401H-98 PNP Transistors

Features

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



Maximum Ratings ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CEO}	Collector Emitter Voltage	-150	V
V_{CBO}	Collector Base Voltage	-160	V
V_{EBO}	Emitter Base Voltage	-5	V
I_C	Collector Current	-600	mA
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)

Symbol	Parameter	Test Conditions	Min	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=-0.1\text{mA}, I_E=0$	-160		V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=-1\text{mA}, I_B=0$	-150		V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=-0.01\text{mA}, I_C=0$	-5		V
I_{CBO}	Collector cut-off current	$V_{CB}=-120\text{V}, I_E=0$		-50	nA
I_{EBO}	Emitter cut-off current	$V_{EB}=-3\text{V}, I_C=0$		-50	nA
$h_{FE(1)}$	Dc current gain	$V_{CE}=-5\text{V}, I_C=-1\text{mA}$	60		
$h_{FE(2)}$		$V_{CE}=-5\text{V}, I_C=-10\text{mA}$	60	300	
$h_{FE(3)}$		$V_{CE}=-5\text{V}, I_C=-50\text{mA}$	50		
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C=-50\text{mA}, I_B=-5\text{mA}$		-0.5	V
$V_{BE(sat)}$	Base-emitter saturation voltage	$I_C=-50\text{mA}, I_B=-5\text{mA}$		-1	V
f_T	Transition frequency	$V_{CE}=-5\text{V}, I_C=-10\text{mA}, f=30\text{MHz}$	100	300	MHz

*Pulse test: Pulse Width <300 μs , Duty Cycle<2.0%

Classification OF $h_{FE(1)}$

RANK		A	B	C
RANGE	100-160	100-150	150-200	200-300

Typical Characteristics

