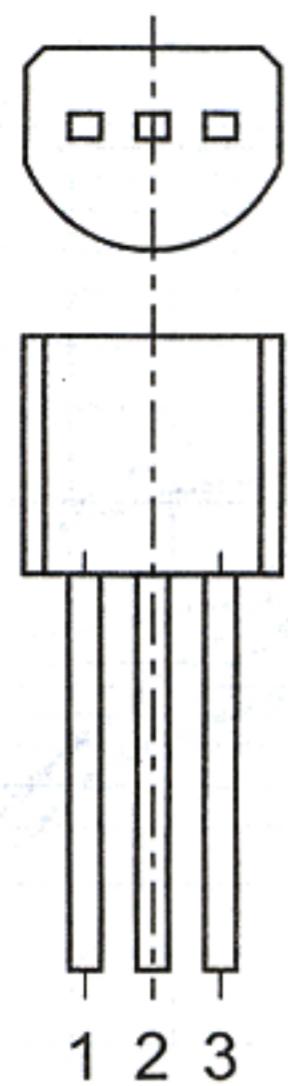


# TO-92 Plastic-Encapsulate Transistors

## 2N5401 TRANSISTOR(PNP)



### TO-92

- 1.EMITTER
- 2.BASE
- 3.COLLECTOR

### FEATURES

#### Power dissipation

$P_{CM}$ : 0.625W ( $T_{amb}=25^{\circ}C$ )

#### Collector current

$I_{CM}$ : -0.6 A

#### Collector-base voltage

$V_{(BR)CBO}$ : -160 V

#### Operating and storage junction temperature range

$T_J, T_{stg}$ : -55°C to + 150°C

### ELECTRICAL CHARACTERISTICS

( $T_{amb}=25^{\circ}C$  unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100 \mu A, I_E = 0$	-160		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1 mA, I_B = 0$	-150		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10 \mu A, I_C = 0$	-5		V
Collector cut-off current	$I_{CBO}$	$V_{CE} = -120 V, I_E = 0$		-0.05	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -4 V, I_C = 0$		-0.05	$\mu A$
DC current gain	$h_{FE(1)}$	$V_{CE} = -5 V, I_C = -1 mA$	80		
	$h_{FE(2)}$	$V_{CE} = -5 V, I_C = -10 mA$	80	250	
	$h_{FE(3)}$	$V_{CE} = -5 V, I_C = -50 mA$	50		
Collector-emitter saturation voltage	$V_{CESat}$	$I_C = -50 mA, I_B = -5 mA$		-0.5	V
Base-emitter saturation voltage	$V_{BESat}$	$I_C = -50 mA, I_B = -5 mA$		-1	V
Transition frequency	$f_T$	$V_{CE} = -5 V, I_C = -10 mA$ $f = 30 MHz$	100		MHz

### CLASSIFICATION OF $h_{FE(2)}$

Rank	A	B	C
Range	85-160	120-180	150-250

# Typical Characteristics

2N5401

