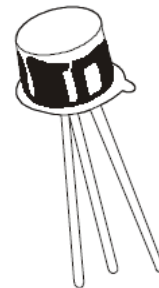


### Small Signal General Purpose Transistor (PNP)

#### Features

- Switching and Linear Application  
DC to VHF Amplifier Application
- RoHS Compliant



#### Mechanical Data

<b>Case:</b>	TO-18, Metal can package
<b>Terminals:</b>	Solderable per MIL-STD-202, Method 208
<b>Weight:</b>	0.35 grams

TO-18



#### Maximum Ratings *(T<sub>Ambient</sub>=25°C unless noted otherwise)*

Symbol	Description	2N2907A	Unit
<b>V<sub>CB0</sub></b>	Collector-Base Voltage	60	V
<b>V<sub>CEO</sub></b>	Collector-Emitter Voltage	60	V
<b>V<sub>EB0</sub></b>	Emitter-Base Voltage	5.0	V
<b>I<sub>C</sub></b>	Collector Current Continuous	600	mA
<b>P<sub>D</sub></b>	Power Dissipation at T <sub>A</sub> =25°C	400	mW
	Power Dissipation Derate above T <sub>A</sub> =25°C	2.28	mW/° C
	Power Dissipation at T <sub>C</sub> =25°C	1.8	W
	Power Dissipation Derate above T <sub>C</sub> =25°C	10.3	mW/° C
<b>T<sub>J</sub>, T<sub>STG</sub></b>	Operating Junction and Storage Temperature Range	-65 to +200	° C

# Small Signal General Purpose Transistor (PNP)

## 2N2907A

### Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	Min.	Max.	Unit	Conditions
<b>VCBO</b>	Collector-Base Voltage	60	-	V	$I_C=10\mu A, I_E=0$
<b>*VCEO</b>	Collector-Emitter Voltage	60	-	V	$I_C=10mA, I_B=0$
<b>VEBO</b>	Emitter-Base Voltage	5.0	-	V	$I_E=10\mu A, I_C=0$
<b>hFE</b>	D.C. Current Gain	75	-		$V_{CE}=10V, I_C=0.1mA$
		100	-		$V_{CE}=10V, I_C=1mA$
		100	-		$V_{CE}=10V, I_C=10mA$
		100	300		$*V_{CE}=10V, I_C=150mA$
		50	-		$*V_{CE}=10V, I_C=500mA$
<b>*VCE(sat)</b>	Collector-Emitter Saturation Voltage	-	0.4	V	$I_C=150mA, I_B=15mA$
		-	1.6	V	$I_C=500mA, I_B=50mA$
<b>*VBE(sat)</b>	Base-Emitter Saturation Voltage	-	1.3	V	$I_C=150mA, I_B=15mA$
		-	2.6	V	$I_C=500mA, I_B=50mA$
<b>ICBO</b>	Collector-Cut-off Current	-	10	nA	$V_{CB}=50V, I_E=0$
		-	10	$\mu A$	$V_{CB}=50V, I_E=0, T_A=150^{\circ}C$
<b>ICEX</b>	Collector-Cut-off Current	-	50	nA	$V_{CE}=30V, V_{BE}=0.5V$
<b>IB</b>	Base Current	-	50	nA	$V_{CE}=30V, V_{BE}=0.5V$
<b>**ft</b>	Transition Frequency	200	-	MHz	$I_C=50mA, V_{CE}=20V, f=100MHz$
<b>Cob</b>	Out-Put Capacitance	-	8.0	pF	$V_{CB}=10V, I_E=0, f=100KHz$
<b>Cib</b>	In-Put Capacitance	-	30	pF	$V_{BE}=2V, I_C=0, f=100KHz$
<b>td</b>	Delay Time	-	10	nS	$I_C=150mA, I_{B1}=15mA$
<b>tr</b>	Rise Time	-	40	nS	$V_{CC}=30V$
<b>ton</b>	Turn-On Time	-	45	nS	
<b>ts</b>	Storage Time	-	80	nS	$I_C=150mA, I_{B1}=I_{B2}=15mA$
<b>tf</b>	Fall Time	-	30	nS	$V_{CC}=6V$
<b>toff</b>	Turn-Off Time	-	100	nS	

\*Pulse Test: -Pulse Width=300 $\mu$ s, Duty Cycle=2%

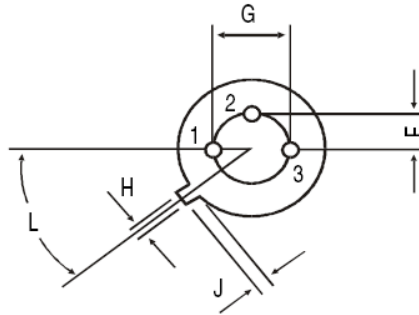
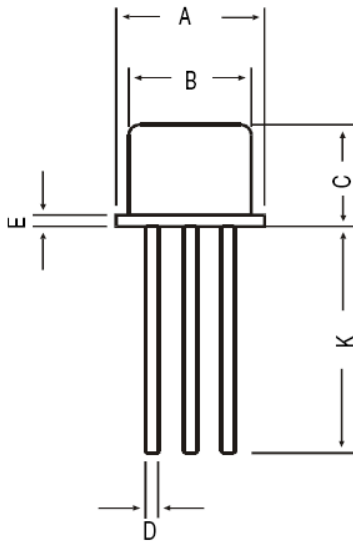
# Small Signal General Purpose Transistor (PNP)

## 2N2907A

\*\*ft is defined as the frequency at which  $h_{fe}$  extrapolates to unity

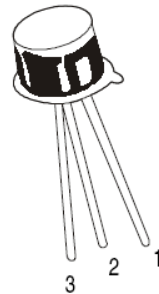
### Dimensions in mm

#### TO-18



All dimensions in mm.

DIM	MIN	MAX
A	5.24	5.84
B	4.52	4.97
C	4.31	5.33
D	0.40	0.53
E	—	0.76
F	—	1.27
G	—	2.97
H	0.91	1.17
J	0.71	1.21
K	12.70	—
L	45 DEG	



#### PIN CONFIGURATION

1. EMITTER
2. BASE
3. COLLECTOR

### Packing Information:

Standard Pack	
Details	Net Weight/Qty.
1k/polybag	350gm/1k pcs

# Small Signal General Purpose Transistor (PNP)

2N2907A

## Carton Information:

Inner Carton Box	
Size	Qty.
3' x 7.5' x 7.5'	5k pcs

Outer Carton Box		
Size	Qty.	Gross Weight
17' x 15' x 13.5'	80k pcs	34kgs

## How to contact us:

### US HEADQUARTERS

28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162

Tel: (800) TAITRON (800) 824-8766 (661) 257-6060

Fax: (800) TAITFAX (800) 824-8329 (661) 257-6415

Email: [taitron@taitroncomponents.com](mailto:taitron@taitroncomponents.com)

Http://[www.taitroncomponents.com](http://www.taitroncomponents.com)

### TAITRON COMPONENTS MEXICO, S.A .DE C.V.

BOULEVARD CENTRAL 5000 INTERIOR 5 PARQUE INDUSTRIAL ATITALAQUIA, HIDALGO C.P.

42970 MEXICO

Tel: +52-55-5560-1519

Fax: +52-55-5560-2190

### TAITRON COMPONENTS INCORPORATED REPRESENTAÇÕES DO BRASIL LTDA

RUA DOMINGOS DE MORAIS, 2777, 2.ANDAR, SALA 24 SAÚDE - SÃO PAULO-SP 04035-001 BRAZIL

Tel: +55-11-5574-7949

Fax: +55-11-5572-0052

### TAITRON COMPONENTS INCORPORATED, SHANGHAI REPRESENTATIVE OFFICE

METROBANK PLAZA, 1160 WEST YAN' AN ROAD, SUITE 1503, SHANGHAI, 200052, CHINA

Tel: +86-21-5424-9942

Fax: +86-21-5424-9931