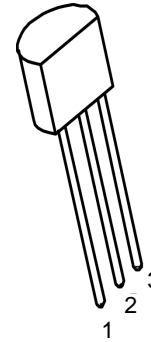


**RoHS  
Compliant**

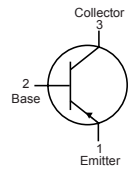


**Features:**

- Collector-Emitter Voltage:  $V_{CE0} = 150V$
- Collector Dissipation:  $P_c (\text{max}) = 625mW$
- Suffix "C" means Center Collector (1. Emitter 2. Collector 3. Base)



**TO-92**



**Absolute Max. Ratings  $T_A=25^\circ C$  unless otherwise noted**

Parameter	Symbol	Value	Units
Collector-Base Voltage	$V_{CBO}$	160	V
Collector-Emitter Voltage	$V_{CEO}$	150	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_c$	600	mA
Collector Dissipation	$P_c$	625	mW
Junction Temperature	$T_J$	150	$^\circ C$
Storage Temperature	$T_{STG}$	-55 to +150	$^\circ C$

**Electrical Characteristics  $T_A = 25^\circ C$  unless otherwise noted**

Parameter	Symbol	Test Condition	Min.	Type	Max.	Units
Collector-Base Breakdown Voltage	$BV_{CBO}$	$I_c = 100\mu A, I_E = 0$	160			V
*Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_c = 1mA, I_B = 0$	150			V
Emitter-Base Breakdown Voltage	$BV_{EBO}$	$I_E = 10\mu A, I_C = 0$	5			V
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = 120V, I_E = 0$			50	nA
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = 3V, I_C = 0$			50	nA
*DC Current Gain	$h_{FE}$	$I_c = 1mA, V_{CE} = 5V$ $I_c = 10mA, V_{CE} = 5V$ $I_c = 50mA, V_{CE} = 5V$	30 60 50		240	
*Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_c = 10mA, I_B = 1mA$ $I_c = 50mA, I_B = 5mA$			0.2 0.5	V V
*Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_c = 10mA, I_B = 1mA$ $I_c = 50mA, I_B = 5mA$			1 1	V V
Current Gain Bandwidth Product	$f_T$	$I_c = 10mA, V_{CE} = 10V,$ $f = 100MHz$	100		400	MHz
Output Capacitance	$C_{ob}$	$V_{CB} = 10V, I_E=0, f = 1MHz$			6	pF
Noise Figure	$N_F$	$I_c = 250\mu A, V_{CE} = 5V$ $R_S=1K\Omega$ $f = 10Hz \text{ to } 15.7KHz$			8	dB

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

## Typical Characteristics

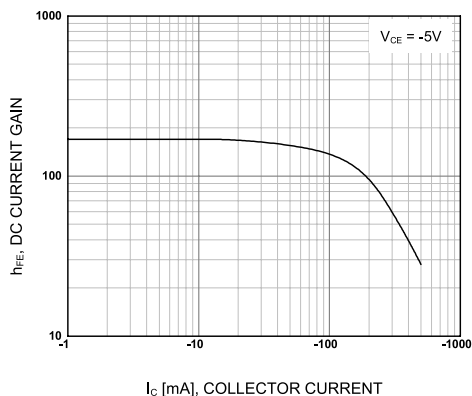


Figure 1. DC current Gain

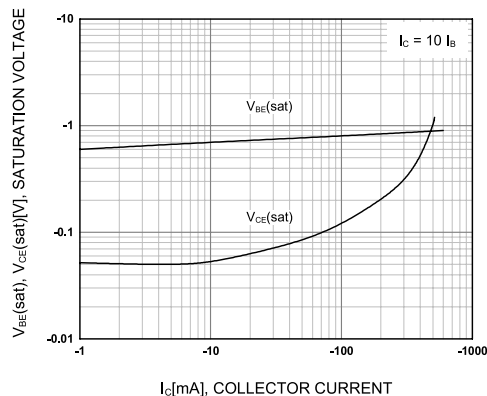


Figure 2. Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage

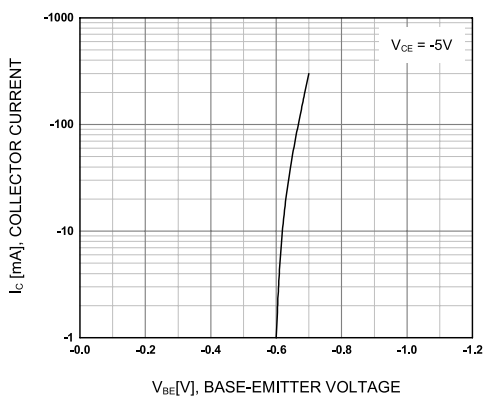


Figure 3. Base-Emitter On Voltage

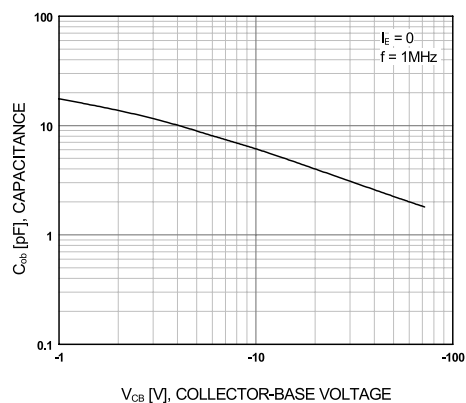


Figure 4. Output Capacitance

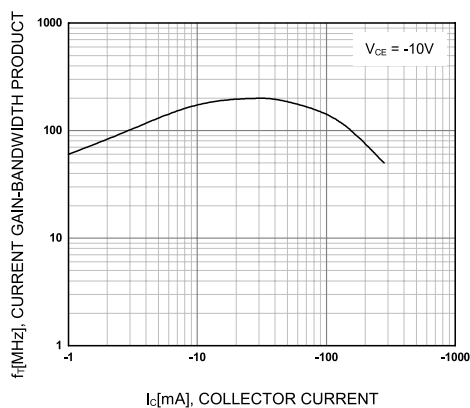


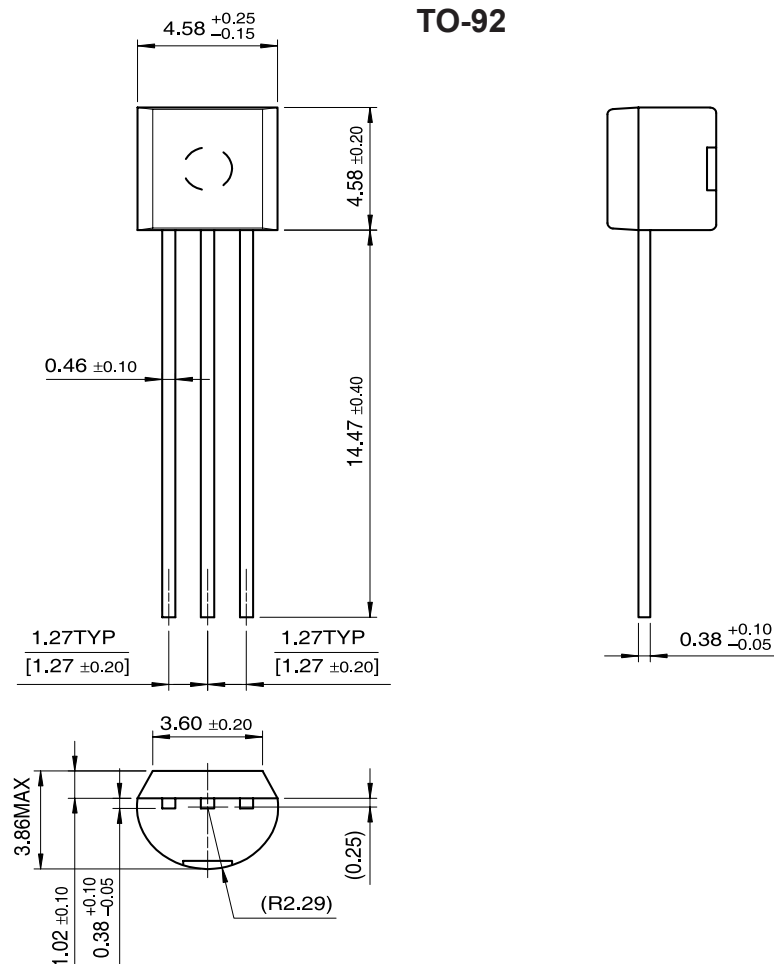
Figure 5. Current Gain Bandwidth Product

# Amplifier Transistor



## Package Dimensions:

TO-92



Dimensions : Millimetres

## Part Number Table

Description	Part Number
PNP Epitaxial Silicon Transistor	2N5401

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