

## Descriptions

This is Silicon PNP transistor in a TO-92 Plastic Package

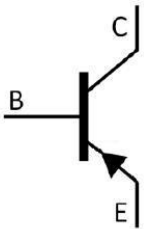
## Features

- Low Leakage current
- Low collector saturation voltage

## Applications

General amplifier.

## Equivalent Circuit



## Pinning



PIN1: Collector    PIN 2: Base    PIN 3: Emitter

## hFE Classifications & Marking

See Marking Instructions.

**Absolute Maximum Ratings(Ta=25°C)**

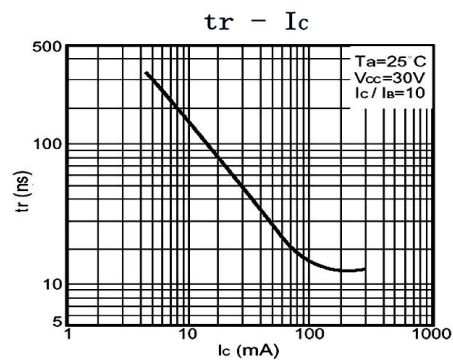
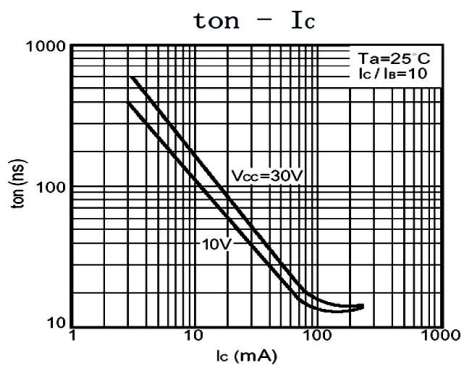
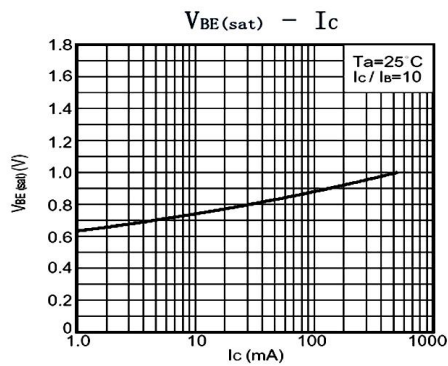
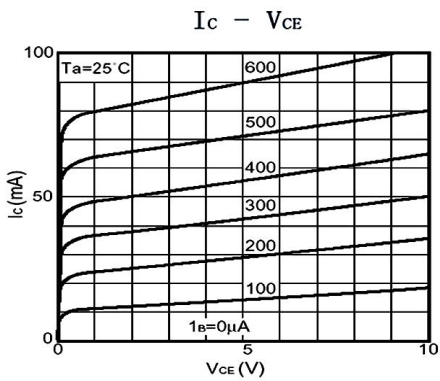
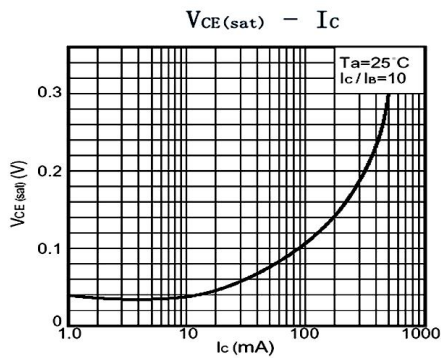
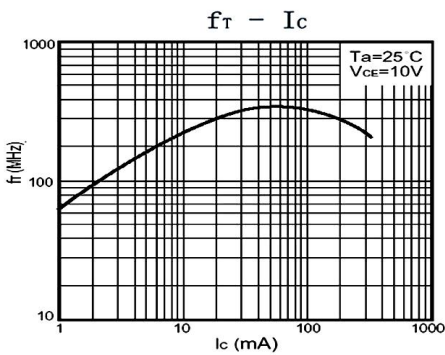
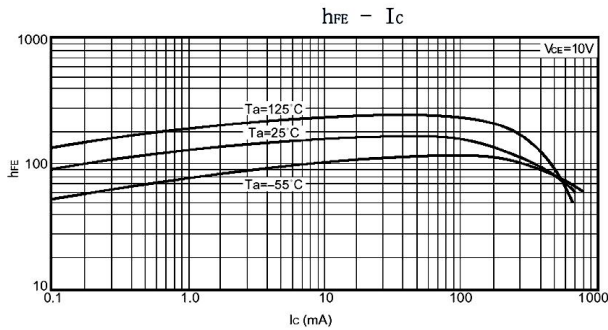
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V <sub>CB0</sub>	-60	V
Collector to Emitter Voltage	V <sub>CEO</sub>	-60	V
Emitter to Base Voltage	V <sub>EBO</sub>	-5.0	V
Collector Current - Continuous	I <sub>C</sub>	-600	mA
Collector Power Dissipation	P <sub>C</sub>	625	mW
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-55 ~ 150	°C

**Electrical Characteristics(Ta=25°C)**

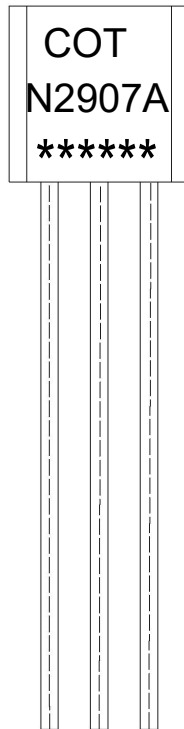
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V <sub>CB0</sub>	I <sub>C</sub> =-10μA I <sub>E</sub> =0	-60			V
Collector to Emitter Breakdown Voltage	V <sub>CEO</sub>	I <sub>C</sub> =-10mA I <sub>B</sub> =0	-60			V
Emitter to Base Breakdown Voltage	V <sub>EBO</sub>	I <sub>E</sub> =-10μA I <sub>C</sub> =0	-5.0			V
Collector Cut-Off Current	I <sub>CB0</sub>	V <sub>CB</sub> =-50V I <sub>E</sub> =0			-0.1	μA
DC Current Gain	h <sub>FE(1)*</sub>	V <sub>CE</sub> =-10V I <sub>C</sub> =-150mA	100		300	
	h <sub>FE(2)*</sub>	V <sub>CE</sub> =-10V I <sub>C</sub> =-500mA	50			
	h <sub>FE(3)</sub>	V <sub>CE</sub> =-10V I <sub>C</sub> =-10mA	100			
	h <sub>FE(4)</sub>	V <sub>CE</sub> =-10V I <sub>C</sub> =-1.0mA	100			
	h <sub>FE(5)</sub>	V <sub>CE</sub> =-10V I <sub>C</sub> =-0.1mA	75			
Collector-Emitter Saturation Voltage	V <sub>CE(sat)(1)*</sub>	I <sub>C</sub> =-150mA I <sub>B</sub> =-15mA			-0.4	V
	V <sub>CE(sat)(2)*</sub>	I <sub>C</sub> =-500mA I <sub>B</sub> =-50mA			-1.6	V
Base-Emitter Saturation Voltage	V <sub>BE(sat)(1)*</sub>	I <sub>C</sub> =-150mA I <sub>B</sub> =-15mA			-1.3	V
	V <sub>BE(sat)(2)*</sub>	I <sub>C</sub> =-500mA I <sub>B</sub> =-50mA			-2.6	V
Transition Frequency	f <sub>T</sub>	V <sub>CE</sub> =-20V f=100MHz I <sub>C</sub> =-50mA	200			MHz
Collector Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> =-10V f=0.1MHz I <sub>E</sub> =0			30	pF
Turn-On Time	T <sub>on</sub>	V <sub>CC</sub> =-30V V <sub>BE(off)</sub> =-1.5V I <sub>C</sub> =-150mA I <sub>B1</sub> =-15mA			0.05	μs
Turn-Off Time	T <sub>off</sub>	V <sub>CC</sub> =-30V I <sub>B1</sub> =I <sub>B2</sub> =-15mA I <sub>C</sub> =-150mA			0.1	μs

\*Pulse test: pulse width≤300μs,duty cycle≤2.0%

Electrical Characteristic Curve



**Marking Instructions**



Note:

COT: Company Code.

N2907A: Product Type Code.

\*\*\*\*\*: \*: Inner Code \* : Year Code \*\*: Week Code \*\*: Lot Code

**Packaging SPEC**

**BULK**

Package Type	Units					Dimension (unit: mm3)		
	Units/Bag	Bags/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Bag	Inner Box	Outer Box
TO-92	1,000	10	10,000	5	50,000	135×190	237×172×102	560×245×195
	1,000	10	10,000	10	100,000	135×190	237×172×102	560×245×375

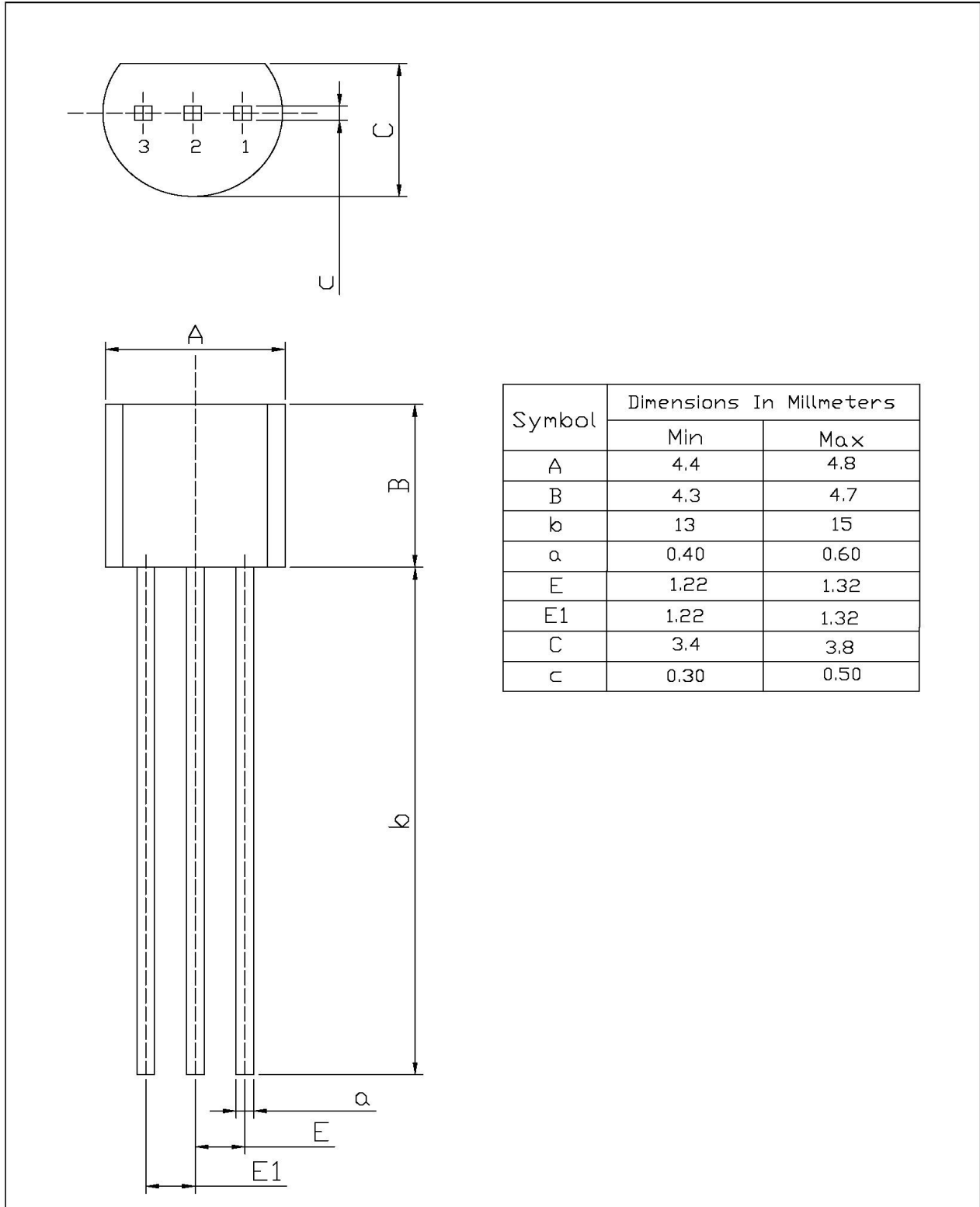
**AMMO**

Package Type	Units					Dimension (unit: mm3)	
	Units/tape	Tape/Inner Box	Rows/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Inner Box	Outer Box
TO-92	3,000	1	120	10	30,000	328×230×42	480×346×235, 547×407×268

Package Dimensions

TO-92

Unit: mm



Symbol	Dimensions In Millimeters	
	Min	Max
A	4.4	4.8
B	4.3	4.7
b	13	15
a	0.40	0.60
E	1.22	1.32
E1	1.22	1.32
C	3.4	3.8
c	0.30	0.50