

2N4870  
2N4871

**SILICON  
PN UNIJUNCTION TRANSISTORS**



**TO-92 CASE**



[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR 2N4870 and 2N4871 are silicon PN unijunction transistors designed for oscillator, triggering and timing applications.

**MARKING: FULL PART NUMBER**

**MAXIMUM RATINGS:** ( $T_A=25^\circ\text{C}$ )

Emitter Reverse Voltage
Interbase Voltage
RMS Emitter Current
Peak Emitter Current (Duty Cycle $\leq 1\%$ , PRR=10pps)
RMS Power Dissipation
Operating Junction Temperature
Storage Temperature

**SYMBOL**

$V_{B2E}$	30
$V_{B2B1}$	35
$I_e$	1.5
$i_e$	1.0
$P_D$	300
$T_J$	-65 to +125
$T_{stg}$	-65 to +150

**UNITS**

V
V
A
A
mW
$^\circ\text{C}$
$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$ )

**SYMBOL TEST CONDITIONS**

$\eta$	$V_{B2B1}=10\text{V}$
$R_{BB}$	$V_{B2B1}=3.0\text{V}$
$I_{EB2O}$	$V_{B2E}=30\text{V}$
$I_V$	$V_{B2B1}=20\text{V}, R_{B2}=100\Omega$
$I_P$	$V_{B2B1}=25\text{V}$
$V_{OB1}$	$V_1=20\text{V}$

**2N4870**

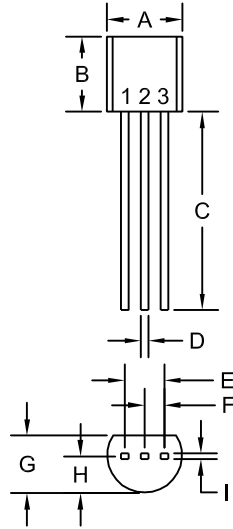
**2N4871**

MIN	MAX	MIN	MAX	UNITS
0.56	0.75	0.70	0.85	
4.0	9.1	4.0	9.1	k $\Omega$
-	1.0	-	1.0	$\mu\text{A}$
2.0	-	4.0	-	mA
-	5.0	-	5.0	$\mu\text{A}$
3.0	-	5.0	-	V

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**TO-92 CASE - MECHANICAL OUTLINE**



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A (DIA)	0.175	0.205	4.45	5.21
B	0.170	0.210	4.32	5.33
C	0.500	-	12.70	-
D	0.016	0.022	0.41	0.56
E	0.100		2.54	
F	0.050		1.27	
G	0.125	0.165	3.18	4.19
H	0.080	0.105	2.03	2.67
I	0.015		0.38	

TO-92 (REV: R1)

**LEAD CODE:**

- 1) Base 1
- 2) Emitter
- 3) Base 2

**MARKING:**  
**FULL PART NUMBER**

R1

R1 (23-April 2013)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

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### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

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### REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

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### CONTACT US

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