

2N4870
2N4871

**SILICON
PN UNIJUNCTION TRANSISTORS**



TO-92 CASE



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

SYMBOL		UNITS
V_{B2E}	30	V
V_{B2B1}	35	V
I_e	1.5	A
i_e	1.0	A
P_D	300	mW
T_J	-65 to +125	$^\circ\text{C}$
T_{stg}	-65 to +150	$^\circ\text{C}$

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

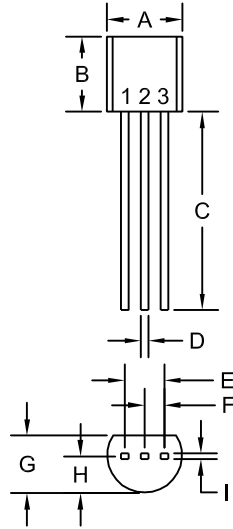
SYMBOL	TEST CONDITIONS	2N4870		2N4871		UNITS
		MIN	MAX	MIN	MAX	
η	$V_{B2B1}=10\text{V}$	0.56	0.75	0.70	0.85	
R_{BB}	$V_{B2B1}=3.0\text{V}$	4.0	9.1	4.0	9.1	k Ω
I_{EB2O}	$V_{B2E}=30\text{V}$	-	1.0	-	1.0	μA
I_V	$V_{B2B1}=20\text{V}$, $R_{B2}=100\Omega$	2.0	-	4.0	-	mA
I_P	$V_{B2B1}=25\text{V}$	-	5.0	-	5.0	μA
V_{OB1}	$V_1=20\text{V}$	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



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

DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2nd 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

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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