

SILICON

PN UNIJUNCTION TRANSISTORS

TO-92 CASE



www.centralsemi.com

DESCRIPTION:

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

MARKING: FULL PART NUMBER

UNITS MAXIMUM RATINGS: (T_A=25°C) SYMBOL Emitter Reverse Voltage 30 V V_{B2E} Interbase Voltage V_{B2B1} 35 V **RMS Emitter Current** 1.5 А ۱_e Peak Emitter Current (Duty Cycle ≤1%, PRR=10pps) ie 1.0 А **RMS** Power Dissipation 300 mW P_D °C **Operating Junction Temperature** -65 to +125 ТJ Storage Temperature °C -65 to +150 T_{stg}

| ELECTRICA | L CHARACTERISTICS: (T _A =25°C) | <u>2N4</u> | 870 | <u>2N4</u> | <u>871</u> | |
|-------------------|---|------------|------|------------|------------|-------|
| SYMBOL | TEST CONDITIONS | MIN | MAX | MIN | MAX | UNITS |
| η | V _{B2B1} =10V | 0.56 | 0.75 | 0.70 | 0.85 | |
| R _{BB} | V _{B2B1} =3.0V | 4.0 | 9.1 | 4.0 | 9.1 | kΩ |
| I _{EB2O} | V _{B2E} =30V | - | 1.0 | - | 1.0 | μA |
| IV | V _{B2B1} =20V, R _{B2} =100Ω | 2.0 | - | 4.0 | - | mA |
| lP | V _{B2B1} =25V | - | 5.0 | - | 5.0 | μΑ |
| V _{OB1} | V ₁ =20V | 3.0 | - | 5.0 | - | V |

R1 (23-April 2013)

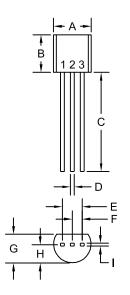




SILICON PN UNIJUNCTION TRANSISTORS

R1

TO-92 CASE - MECHANICAL OUTLINE



| DIMENSIONS | | | | |
|-----------------|--------|-------|-------------|------|
| | INCHES | | MILLIMETERS | |
| SYMBOL | MIN | MAX | MIN | MAX |
| A (DIA) | 0.175 | 0.205 | 4.45 | 5.21 |
| В | 0.170 | 0.210 | 4.32 | 5.33 |
| С | 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 |
| Н | 0.080 | 0.105 | 2.03 | 2.67 |
| | 0.015 | | 0.38 | |
| TO-92 (REV: R1) | | | | |

LEAD CODE:

| 1) | Base 1 |
|--------|--------|
| \sim | |

2) Emitter
3) Base 2

MARKING: FULL PART NUMBER

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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

DESIGNER SUPPORT/SERVICES

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

- Free guick 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

· Custom product packing

Custom bar coding for shipments

- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits
- · Custom product and package development

REQUESTING PRODUCT PLATING

- If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when 1. 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).

CONTACT US

Corporate Headquarters & Customer Support Team

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Worldwide Field Representatives: www.centralsemi.com/wwreps

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Product End of Life Notification

| PDN ID: | PDN01115 |
|--------------------|------------|
| Notification Date: | 12/12/18 |
| Last Buy Date: | |
| Last Shipment Date | Stock Only |

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Please be advised that Central Semiconductor must immediately discontinue the product(s) listed in the attached PDN notice. We are unable to accept any further orders for these products **unless** we have available inventory on hand.

You may have purchased one or more of the products listed. Please do not hesitate to contact your local Central Semiconductor sales representative with any questions or needs you may have. Central regrets any inconvenience this may cause.

Sincerely,

Central Semiconductor Corp.

DISCLAIMER: This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor Corp. will make every effort to offer life-time buy (LTB) opportunities and/or offer replacement devices to existing customers for discontinued devices, however, one or both may not be possible for all devices. Please contact your local Central Semiconductor sales representative for LTB opportunities/additional information.



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Product End of Life Notification

| PDN ID: | PDN01115 |
|--------------------|------------|
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Summary: The 2N4870 and 2N4871 unijunction transistors are discontinued and now classified as End of Life (EOL).

Although Central Semiconductor Corp. makes every effort to continue to produce devices that have been proclaimed EOL (End of Life) by other manufacturers, it is an accepted industry practice to discontinue certain devices when customer demand falls below a minimum level of sustainability. Accordingly, the following product(s) have been transitioned to End of Life status as part of Central's ongoing Product Management Process. Any replacement products are noted below. The effective date for placing last purchase orders will be six (6) months from the date of this notice and twelve (12) months from the notice date for final shipments, and minimum order quantities may apply. The last purchase and shipment dates may be extended if inventory is available.

| Central Part Number | Replacement |
|---------------------|-----------------|
| 2N4870 | N/A, Stock Only |
| 2N4871 | N/A, Stock Only |

Central would be happy to assist you by providing additional information or technical data to help locate an alternate source if we have no replacement available. Please email your requests to engineering@centralsemi.com.

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Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Central Semiconductor: 2N4870 2N4871