

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

2N4870
2N4871

SILICON UNIJUNCTION TRANSISTOR

JEDEC TO-92 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N4870, 2N4871 types are P-N Silicon Unijunction Transistors designed for oscillator, triggering and timing applications.

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

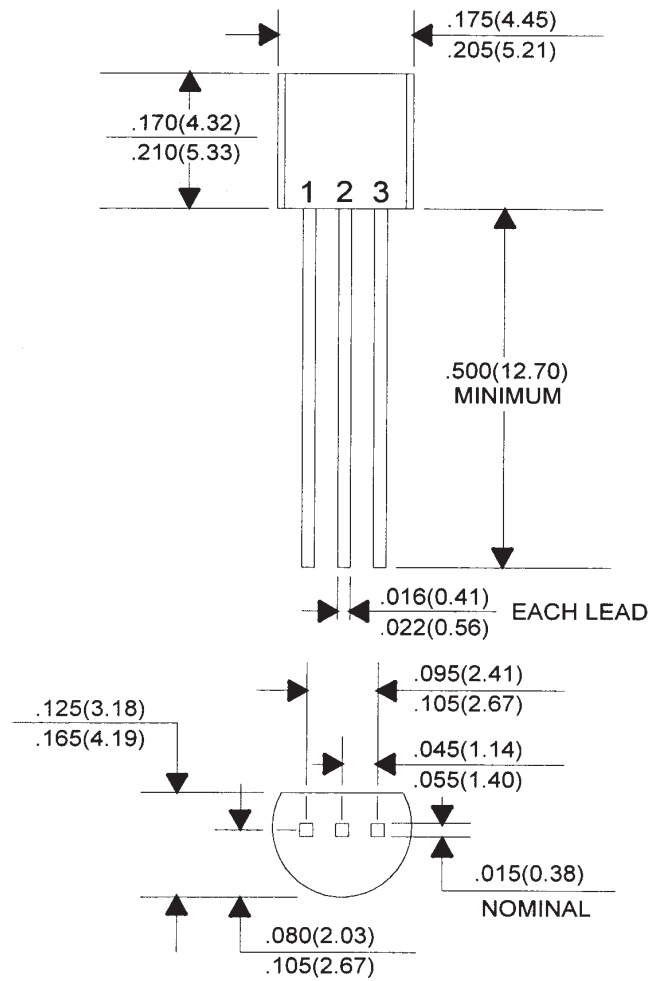
	<u>SYMBOL</u>		<u>UNITS</u>
Emitter Reverse Voltage	V_{B2E}	30	V
Interbase Voltage	V_{B2B1}	35	V
RMS Emitter Current	I_e	1.5	A
Peak Emitter Current (1)	i_e	1.0	A
RMS Power Dissipation	P_D	300	mW
Operating Junction Temperature Range	T_J	-65 to +125	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-65 to +150	$^{\circ}\text{C}$

(1) Duty Cycle $\leq 1\%$, PRR=10 PPS.

ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	2N4870		2N4871		<u>UNITS</u>
		<u>MIN</u>	<u>MAX</u>	<u>MIN</u>	<u>MAX</u>	
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	$\text{k}\Omega$
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

JEDEC TO-92 CASE - MECHANICAL OUTLINE



All Dimensions in Inches (mm).

Lead Code:

1. Base 1
2. Emitter
3. Base 2

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