

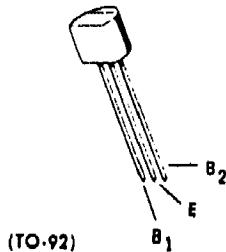
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2N4870 (SILICON)

2N4871



PN unijunction transistors designed for use in pulse and timing circuits, sensing circuits and thyristor trigger circuits.

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

Rating	Symbol	Value	Unit
RMS Power Dissipation*	P_D^*	300	mW
RMS Emitter Current	I_e	50	mA
Peak-Pulse Emitter Current**	i_e^{**}	1.5	Amp
Emitter Reverse Voltage	V_{B2E}	30	Volts
Interbase Voltage†	$V_{B2B1} \dagger$	35	Volts
Operating Junction Temperature Range	T_J	-65 to +125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-65 to +150	$^\circ\text{C}$

Characteristic		Symbol	Min	Typ	Max	Unit
Intrinsic Standoff Ratio* ($V_{B2B1} = 10 \text{ V}$)	2N4870 2N4871	"	0.56 0.70	- -	0.75 0.85	-
Interbase Resistance ($V_{B2B1} = 3.0 \text{ V}$, $I_E = 0$)		R_{BB}	4.0	6.0	9.1	k ohms
Interbase Resistance Temperature Coefficient ($V_{B2B1} = 3.0 \text{ V}$, $I_E = 0$, $T_A = -65 \text{ to } +125^\circ\text{C}$)		αR_{BB}	0.10	-	0.90	$^\circ/\text{C}$
Emitter Saturation Voltage** ($V_{B2B1} = 10 \text{ V}$, $I_E = 50 \text{ mA}$)		$V_{EBI(sat)}^{**}$	-	2.5	-	Volts
Modulated Interbase Current ($V_{B2B1} = 10 \text{ V}$, $I_E = 50 \text{ mA}$)		$I_{B2(mod)}$	-	15	-	mA
Emitter Reverse Current ($V_{B2E} = 30 \text{ V}$, $I_B1 = 0$)		I_{EB20}	-	0.005	1.0	μA
Peak-Point Emitter Current ($V_{B2B1} = 25 \text{ V}$)		I_P	-	1.0	5.0	μA
Valley-Point Current** ($V_{B2B1} = 20 \text{ V}$, $R_{B2} = 100 \text{ ohms}$)	2N4870 2N4871	I_V^{**}	2.0 4.0	5.0 7.0	-	mA
Base-One Peak Pulse Voltage	2N4870 2N4871	V_{OBI}	3.0 5.0	6.0 8.0	-	Volts

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