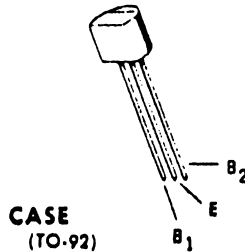


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**2N4870 (SILICON)**  
**2N4871**

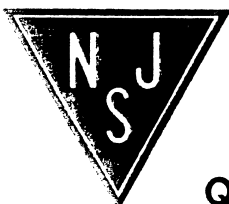


PN unijunction transistors designed for use in pulse and timing circuits, sensing circuits and thyristor trigger circuits.

**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	"	0.58 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 ( $V_{B2B1} = 3.0\text{ V}$ , $I_E = 0$ , $T_A = -65$ to $+125^\circ\text{C}$ )		$\alpha R_{BB}$	0.10	-	0.90	$\% / ^\circ\text{C}$
Emitter Saturation Voltage** ( $V_{B2B1} = 10\text{ V}$ , $I_E = 50\text{ mA}$ )		$V_{EB1(sat)}^{**}$	-	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	$\mu\text{A}$
Peak-Point Emitter Current ( $V_{B2B1} = 25\text{ V}$ )		$I_P$	-	1.0	5.0	$\mu\text{A}$
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	$V_{OB1}$	3.0 5.0	6.0 8.0	-	Volts



**Quality Semi-Conductors**