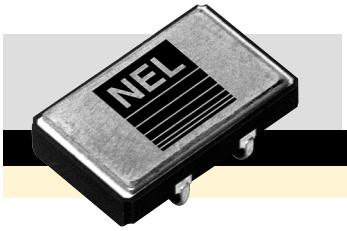


CMOS Compatible SJ-A370 Series

Description

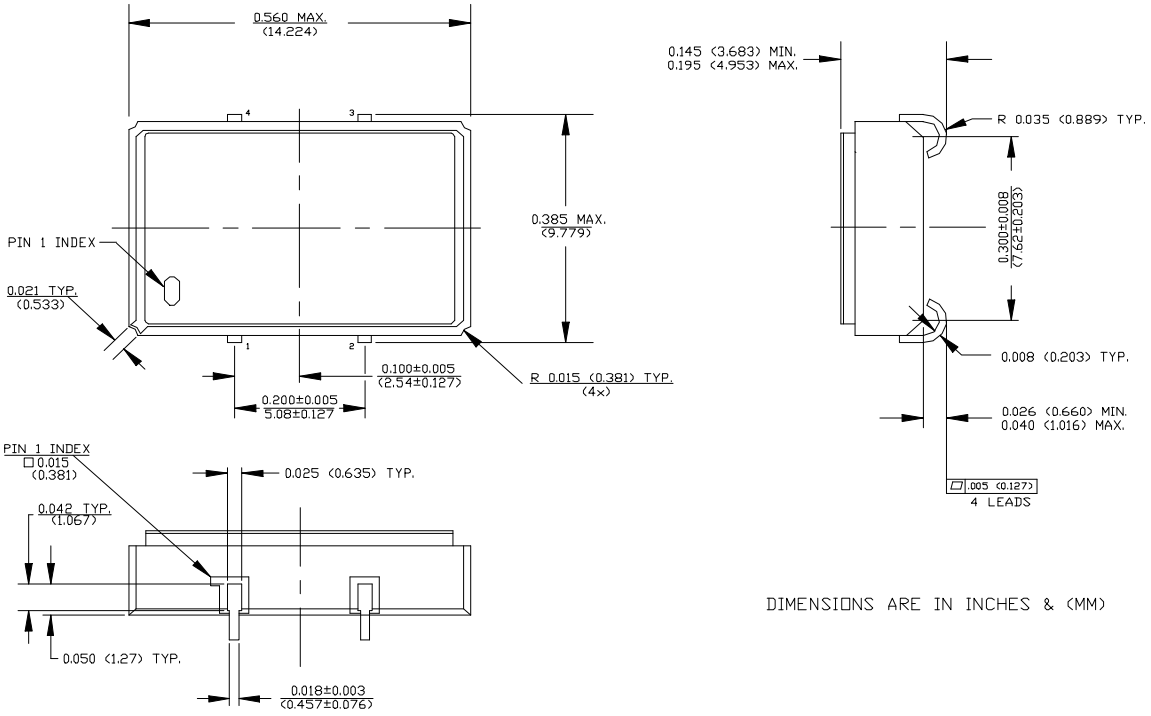
The SJ-A370 Series of quartz crystal oscillators are designed to survive standard wave soldering operations without damage.

Features

- Wide frequency range—2.25MHz to 70.0MHz
- User specified tolerance from ±20ppm
- Will withstand vapor phase temperatures of 253°C for 4 minutes maximum
- Low power consumption
- High shock resistance, to 3000g
- 3.3 volt operation
- Metal lid electrically connected to ground to reduce EMI
- Gold plated leads—Solder dipped leads available upon request
- TTL compatible (HCT) at specified supply voltage

Pin Connection

JEDEC	XTAL	Industry
6	1	N.C.
10	2	Ground
20	3	Output
24	4	V_{DD}



DIMENSIONS ARE IN INCHES & (MM)

NEL FREQUENCY CONTROLS, INC.
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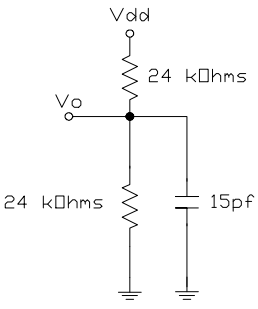
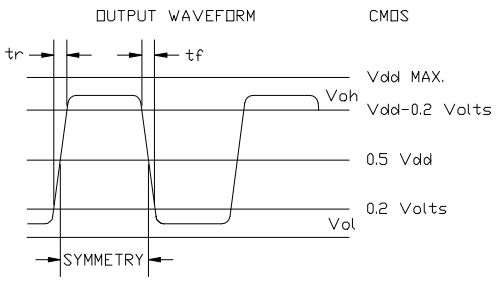
Continued
CMOS Compatible SJ-A370 Series

Operating Conditions and Output Characteristics

	PARAMETER	CONDITIONS	MINIMUM	MAXIMUM
General Characteristics	Supply voltage (V_{DD})	-----	3.15V	3.45V
	Supply current (I_{DD})(1)	V_{DD} or ground current	0.0 mA	40 mA
	Output current (I_O)	Low level output current	0.0 mA	±16.0 mA
	Tolerance	User specified	±20ppm	-----
	Operating temperature (T_A)	-----	0°C	70°C
	Storage temperature (T_S)	-----	-55°C	125°C
	Power dissipation (P_D)	-----	-----	138 mW
	Lead temperature (T_L)	Soldering, 10 sec.	-----	300°C
Output Characteristics	Frequency	-----	2.25MHz	70.0MHz
	Symmetry	@.5V_{DD}	45/55%	55/45%
	Logic 0 (V_{OL})	I_O=600µA	-----	0.2V
	Logic 1 (V_{OH})	I_O=600µA	V_{DD}-0.2V	-----
	Logic 0 (I_{OL} sink)	V_O=0.2V	-----	600µA
	Logic 1 (I_{OH} source)	V_O=V_{DD} -0.2V	-----	600µA
	Rise & fall time (t_r,t_f)	10-90% V_O	-----	8 ns
	Footnote: (1)Supply current is frequency dependant and is significantly lower at lower frequencies. Consult factory for lower current requirements			

(CMOS)





Specialty Oscillators for Unique Requirements
If the characteristics listed above do not meet your specific requirements, specialty solutions are often available.

For example, if you need better stability, extended temperature range, or tighter symmetry, NEL can provide a SJ-A379 series oscillator to serve your needs.

To let us know your special requirements, complete our Specialty Oscillator sheet. We will respond with the desired specialty oscillator, or discuss with you a solution that most closely meets your needs.

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