



CMOS Compatible SJ-370 Series

Description

The **SJ-370 Series** of quartz crystal oscillators are designed to survive standard wave soldering operations without damage.

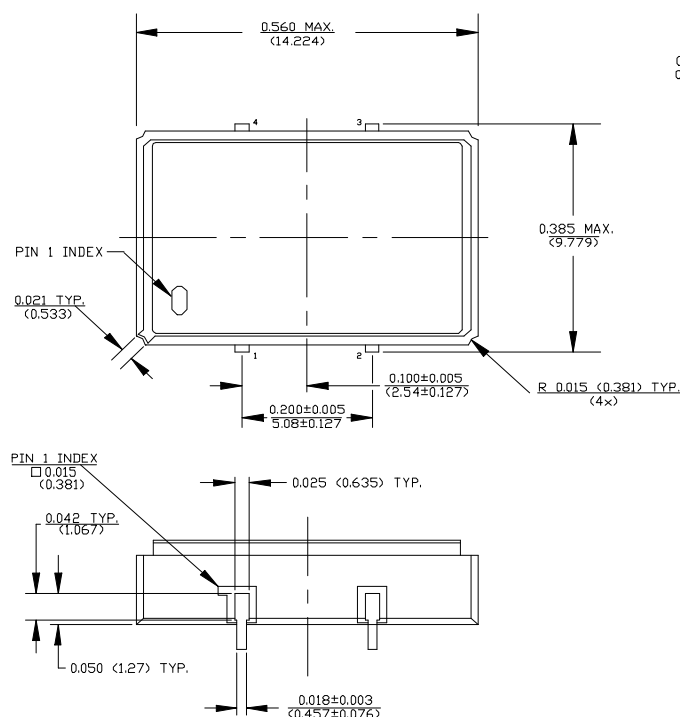
Pin Connection

JEDEC XTAL Industry

6	1	N.C.
10	2	Ground
20	3	Output
24	4	V _{DD}

Features

- Wide frequency range—2.25MHz to 80.0MHz
- User specified tolerance from ± 20 ppm
- Will withstand vapor phase temperatures of 253°C for 4 minutes maximum
- Low power consumption
- High shock resistance, to 3000g
- 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



DIMENSIONS ARE IN INCHES & (MM)

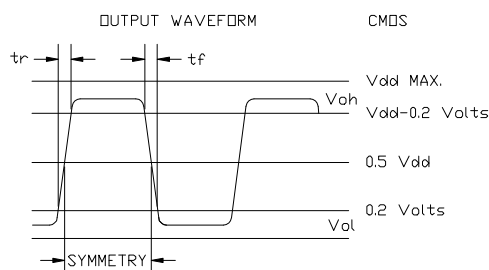
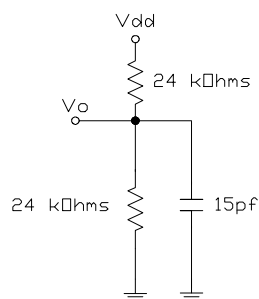
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Operating Conditions and Output Characteristics

	PARAMETER	CONDITIONS	MINIMUM	MAXIMUM
General Characteristics	Supply voltage (V_{DD})	-----	4.75V	5.25V
	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)	-----	-----	210 mW
	Lead temperature (T_L)	Soldering, 10 sec.	-----	300°C
Output Characteristics	Frequency	-----	2.25MHz	80.0MHz
	Symmetry	@.5 V_{DD}	45/55%	55/45%
	Logic 0 (V_{OL})	$I_O=600\mu A$	-----	0.2V
	Logic 1 (V_{OH})	$I_O=600\mu A$	$V_{DD}-0.2V$	-----
	Logic 0 (I_{OL} sink)	$V_O=0.2V$	-----	600 μA
	Logic 1 (I_{OH} source)	$V_O=V_{DD}-0.2V$	-----	600 μA
	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-379 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.

This information has been carefully prepared and is believed to be entirely reliable. However, no responsibility is assumed for inaccuracies. NEL reserves the right to make changes at any time in order to improve design and supply the best product possible.