



## Positive ECL Compatible SK-2910 Series

### Description

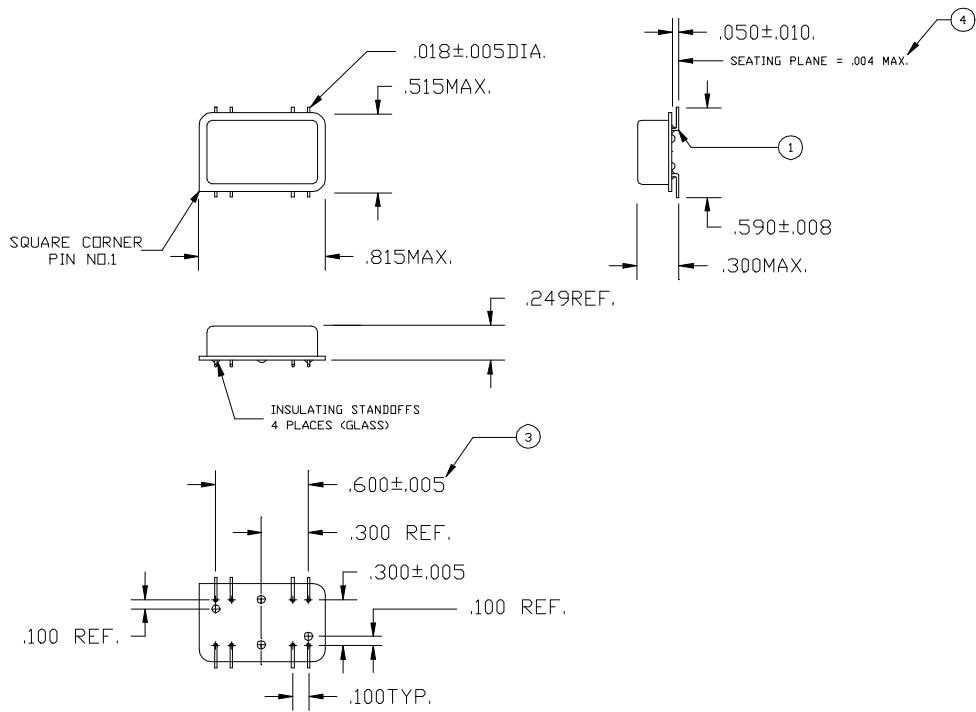
The **SK-2910 Series** of quartz crystal oscillators provide ECLiPS compatible signals. This device is to operate using positive voltage and uses multiple ground pins for improved signal integrity. This device is intended to operate on positive voltage for PECL applications.

### Features

- Wide frequency range—122.0MHz to 300.0MHz
- User specified tolerance from  $\pm 50\text{ppm}$
- Case at electrical ground
- Will withstand vapor phase temperatures of 253°C for 4 minutes maximum
- All metal, resistance weld, hermetically sealed package
- High shock resistance, to 1500g

### Pin Connection

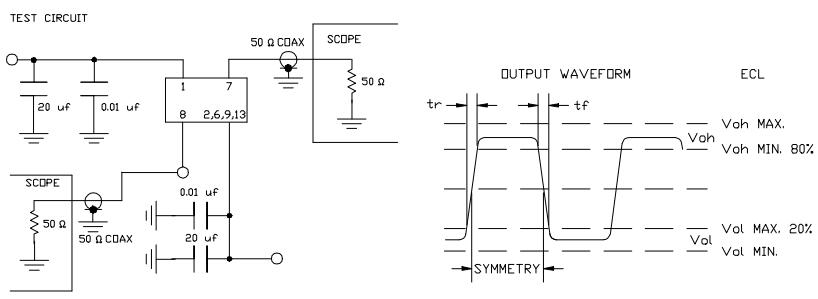
1	V <sub>CC</sub>
2	V <sub>EE</sub> Case
6	V <sub>EE</sub> Case
7	Output
8	/Output
9	V <sub>EE</sub> Case
13	V <sub>EE</sub> Case
14	Enable/Disable



## Continued

## Positive ECL Compatible SK-2910 Series

Operating Conditions and Electrical Characteristics				
General Characteristics	PARAMETER	CONDITIONS	MINIMUM	MAXIMUM
General Characteristics	Supply voltage ( $V_{CC}$ )	-----	4.75V	5.25V
	Supply current ( $I_{CC}$ )	50 ohm termination to 2.00V below $V_{CC}$	0.0 mA	120 mA
	Output current ( $I_O$ )	Low level output current	0.0 mA	$\pm 50.0$ mA
	Tolerance	User specified	$\pm 50$ ppm	-----
	Operating temperature ( $T_A$ )	-----	0°C	70°C
	Storage temperature ( $T_S$ )	-----	-55°C	125°C
Electrical Characteristics	Frequency	-----	122.0MHz	300.0MHz
	Symmetry	@50% points	45/55%	55/45%
	Logic 0 ( $V_{OL}$ ) <sup>(2)</sup>	-----	-----	3.41V
	Logic 1 ( $V_{OH}$ ) <sup>(2)</sup>	-----	3.98V	-----
	Rise & fall time ( $t_r, t_f$ )	20-80% $V_O$	-----	600 psec
	Phaser jitter <sup>(3)</sup>	-----	-----	30 psec
	Enable voltage <sup>(4)(5)</sup>	with $V_{EE} = 0$ V	0V	1.0V
	Disable voltage <sup>(4)(5)</sup>	with $V_{EE} = 0$ V	3.0V	$V_{CC}$
	Footnote:			
(2) $V_{OL}, V_{OH}$ , referenced to ground				
(3)Phase jitter measured from rising edge to the following rising edge. (Lower phase jitter available upon request)				
(4)Input: Logic high (ECL) - disables $V_{EE}$ or Open - enables				
(5)Open to enable pin also enables the output				



TEST CIRCUIT USES A SPLIT SUPPLY OF +2V AND -3V FOR EASE OF TESTING.

## 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 SK-2919 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.