NEL CRYSTAL CLOCK OSCILLATORS

PRELIMINARY SPECIFICATION
SJ-A2920
PECL Compatible

Pin JEDEC	Pin XTAL Industry	Connection
6	1	Output
		Complement
10	2	V_{EE}
20	3	Output
24	4	V_{CC}

Description

The SJ-A2920 Series of quartz crystal oscillators provide ECLIPS compatible signals. Systems designers may now specify space-saving, cost-effective packaged PECL oscillators to meet their timing requirements.

Features

[] Wide frequency range - 50.0MHz to 200.0MHz

[] User specified tolerance from ±25ppm

[] Will withstand vapor phase temperatures of 253°C for 4 minutes maximum.

[] ECLIPS compatible output on Pin 3, complement on Pin 1

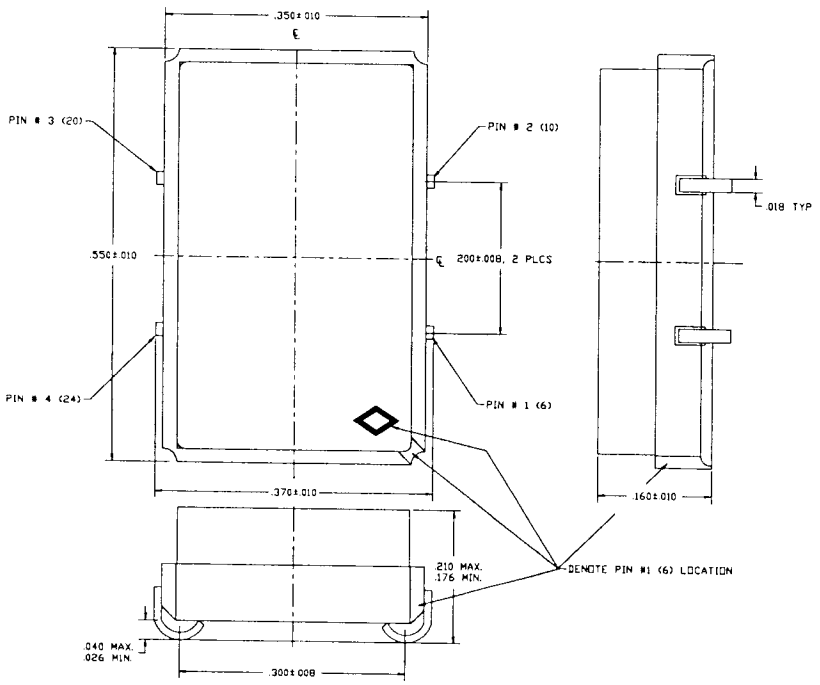
[] High shock resistance, to 3000G

[] 3.3 Volt operation

[] Fast rise and fall times, <600 ps

[] Metal lid electrically connected to ground to reduce EMI

[] Gold plated leads - Solder dipped leads available Upon request.



NEL Frequency Controls, Inc. 357 Beloit Street, P.O. Box 457, Burlington, WI 53105-0457 U.S.A. Phone 262/763-3591 FAX 262/763-2881

Crystal Clock Oscillators

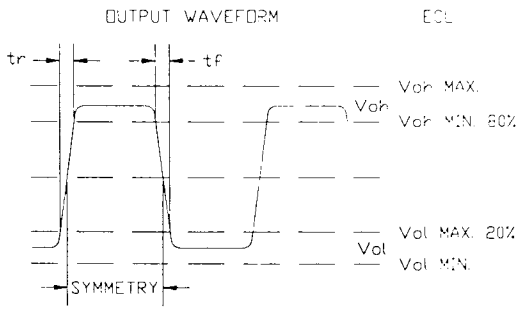
Operating Conditions and Output Characteristics

SJ-A2920

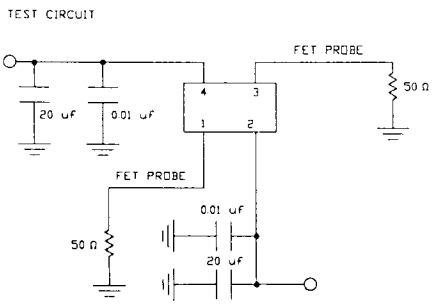
(Continued)

PARAMETER	CONDITIONS	MINIMUM	MAXIMUM
General Characteristics			
Supply voltage (V_{CC})	-----	3. 15V	3.45V
Supply current (I_{CC})	V_{CC} or Ground Current	0.0 mA	80 mA
Output current (I_O)	Low level Output Current	0.0 mA	±50.0 mA
Tolerance[1]	User specified	±25ppm	-----
Operating temperature (T_A)	------	0°C	70°C
Storage temperature (T_S)	-----	-55°C	125°C
Power dissipation (P_D)	-----	------	150 mW
Lead temperature (T_L)	Soldering, 10 sec.	------	300°C
Output Characteristics			
Frequency	------	50.0MHz	200.0MHz
Symmetry	@ 2.01V level	45/55%	55/45%
Logic 0 (V_{OL})[2]	-----	1.35V	1.70V
Logic 1 (V_{OH})[2]	-----	2.28V	2.56V
Rise & fall time (t_r,t_f)	20-80% V_O	-----	600 ps

Footnote:
(1) Tighter tolerances available upon request.
(2) V_{OL}, V_{OH}, referenced to ground (V_{EE}) with V_{CC}=3.3V.



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.



TEST CIRCUIT USES A SPLIT SUPPLY OF +2V AND -1.3V FOR EASE OF TESTING