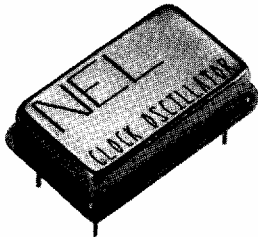


NEL Crystal Clock Oscillators

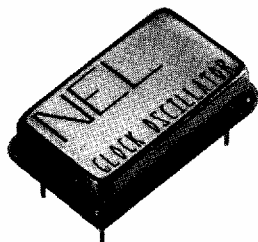
ECL COMPATIBLE

HS-600/2600 Series
(Available from 30MHz to 64.9 MHz)

HS-800/2800 Series
(Available from 65MHz to 250 MHz)



HS-600/2600 Series



HS-800/2800 Series

Description

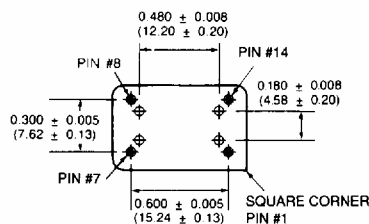
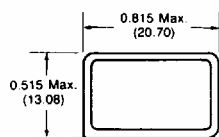
The **HS-600 & HS-800 Series** of quartz crystal clock oscillators provide MECL 10k, 10kH and 100k series compatible signals on pin 8.

The **HS-2600 & HS-2800 series** of quartz crystal clock oscillators provide complementary signals on pin 1. System designers may now specify space saving, cost effective ECL oscillators up to 250 MHz to meet their timing requirement. A wide frequency range is available, from 30 MHz to 250 MHz, with user specified tolerances from $\pm .005\%$, 0°C to $+70^{\circ}\text{C}$.

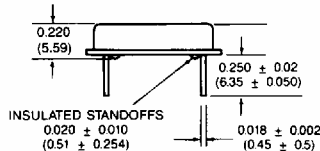
Features

- ☐ Wide frequency range — 30.0 MHz to 250.0 MHz
- ☐ User specified tolerance, from $\pm .005\%$
- ☐ Case at electrical ground
- ☐ MECL 10 k, 10 kH and 100 k Series compatible output on Pin 8, complement on Pin 1, or both
- ☐ Space-saving alternative to discrete component oscillators
- ☐ All metal, resistance weld, hermetically sealed package
- ☐ High shock resistance, to 3,000 Gs

Dimensions



Pin Connection
See Chart to Right



Dimensions are for reference only, inches (mm).

NEL TYPE, FREQUENCY RANGE, PIN CONNECTIONS

NEL OSC. TYPE	FREQUENCY RANGE	PIN CONNECTION				SIGNAL COMPATIBILITY
		1	7	8	14	
HS-600	30 MHz to 64.9 MHz	N/C	CASE & GRD (V_{CC})	OUTPUT	V_{EE} (-5.2V)	10k & 10kH
HS-610	30MHz to 64.9 MHz	N/C	V_{EE} (-5.2V)	OUTPUT	CASE & GRD (V_{CC})	10k & 10kH
HS-620	30MHz to 64.9 MHz	N/C	CASE & GRD (V_{CC})	OUTPUT	V_{EE} (-4.5V)	100k
HS-630	30MHz to 64.9 MHz	N/C	V_{EE} (-4.5V)	OUTPUT	CASE & GRD (V_{CC})	100k
HS-670	30MHz to 64.9 MHz	N/C	CASE & GRD	OUTPUT	V_{CC} (+5V)	10k & 10kH
HS-800	65MHz to 250 MHz	N/C	CASE & GRD (V_{CC})	OUTPUT	V_{EE} (-5.2V)	10k & 10kH
HS-810	65MHz to 250 MHz	N/C	V_{EE} (-5.2V)	OUTPUT	CASE & GRD (V_{CC})	10k & 10kH
HS-820	65MHz to 250 MHz	N/C	CASE & GRD (V_{CC})	OUTPUT	V_{EE} (-4.5V)	100K
HS-830	65MHz to 250 MHz	N/C	V_{EE} (-4.5V)	OUTPUT	CASE & GRD (V_{CC})	100K
HS-870	65MHz to 250 MHz	N/C	CASE & GRD	OUTPUT	V_{CC} (+5.0V)	10k & 10kH
HS-2600	30MHz to 64.9 MHz	Comp. Out	CASE & GRD (V_{CC})	OUTPUT	V_{EE} (-5.2V)	10k & 10kH
HS-2610	30MHz to 64.9 MHz	Comp. Out	V_{EE} (-5.2V)	OUTPUT	CASE & GRD (V_{CC})	10k & 10kH
HS-2670	30MHz to 64.9 MHz	Comp. Out	CASE & GRD	OUTPUT	V_{CC} (+5.0V)	10k & 10kH
HS-2800	65MHz to 250 MHz	Comp. Out	CASE & GRD (V_{CC})	OUTPUT	V_{EE} (-5.2V)	10k & 10kH
HS-2810	65MHz to 250 MHz	Comp. Out	V_{EE} (-5.2V)	OUTPUT	CASE & GRD (V_{CC})	10k & 10kH
HS-2870	65MHz to 250 MHz	Comp. Out	CASE & GRD	OUTPUT	V_{CC} (+5.0V)	10k & 10kH

NEL

**ECL
COMPATIBLE**

**(Available from
30MHz to
64.9 MHz)**

**HS-800/2800
Series
(Available from
65MHz to
250 MHz)**

1. Tested per test circuit diagram
2. Unless otherwise specified by customer
3. Reference test circuit below
4. V_{OL} , V_{OH} referenced to ground
5. Measured between 20% and 80% of output

The diagram shows a digital signal waveform. The signal transitions from a low state to a high state and back to a low state. The rise time (t_r) is the time interval between the 20% and 80% points of the rising edge. The fall time (t_f) is the time interval between the 80% and 20% points of the falling edge. The voltage levels are indicated by horizontal dashed lines: $V_{OH\ Max}$ (maximum high voltage), $V_{OH\ Min}$ (minimum high voltage), Sym (symbolic level), $V_{OL\ Max}$ (maximum low voltage), and $V_{OL\ Min}$ (minimum low voltage).

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