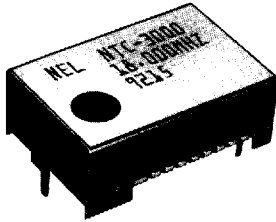


NEL

Temperature Compensated Crystal Oscillators

NTC-3000 SERIES TCXO LEADED PACKAGE Digital Compensated



The NTC-3000 Series TCXO offers in a 3-pin leaded package many of the electrical performances available in the surface mount NTC-1000 TCXO. It is suited for applications which require lower cost leaded oscillators. Typical applications are land mobile radios and cellular phones.

The NTC-3000 TCXO offers the following features:

- ☐ Small size
- ☐ Mechanical frequency adjustment
- ☐ Tight temperature stability

The NTC-3000 TCXO will also be available in June 1992 as a 4-pin leaded package, which provides the following features:

- ☐ DC voltage frequency adjust
- ☐ An optional sinewave output with improved phase noise

Specifications

Reference Oscillator Frequency

Range: 12.8 to 20 MHz
with output frequency
dividers of 1, 2, 4, 6, 8
Standard Frequencies: 14.4 MHz,
15.36 MHz,
20 MHz

Frequency Stability

vs temperature: 1, 2 or 5 ppm
aging < ±1 ppm/year, max
< ±7 ppm/10 years

Operating Temperature Range

-30°C to +85°C

Supply Voltage

+5V ±10%

Supply Current

2.5 mA (typical)

Output Waveform

4 Vp-p squarewave or
500 mVp-p minimum sinewave

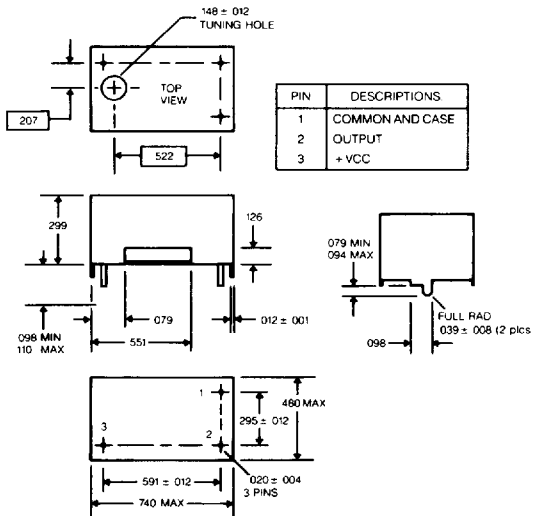
Frequency Adjustment

±7 ppm minimum

Temperature Compensated Crystal Oscillators

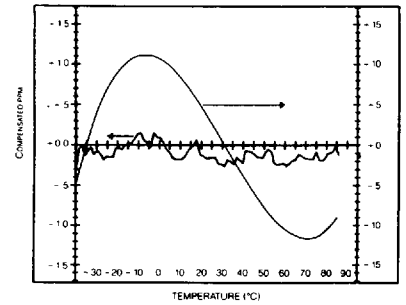


PACKAGE (DIMENSIONS IN INCHES)

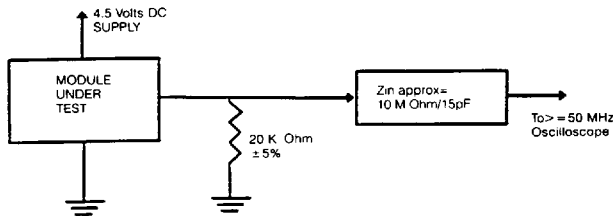


NTC-3000 SERIES TCXO LEADED PACKAGE

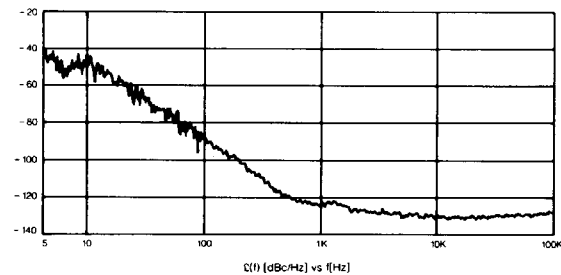
FREQUENCY VS TEMPERATURE



OUTPUT AMPLITUDE MEASUREMENT CIRCUIT



PHASE NOISE



NEL TCXO PART NUMBER DEVELOPMENT

