

- Miniature package
- Frequency Range: 10MHz - 100MHz
- Excellent stability



### DESCRIPTION

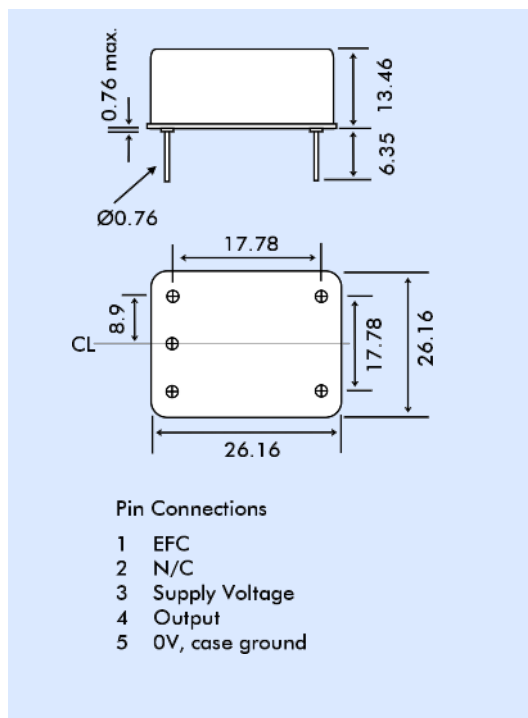
YH1460/1461 series OCXOs are high stability oscillators produced in a miniature package. The part exhibits excellent stability.

### SPECIFICATIONS

|                        |   |
|------------------------|---|
| Frequency Range:       | 10.0MHz to 100.0MHz   |
| Output:                |   |
| YH1460:                | Sinewave: +7dBm ±2dBm into 50Ω  |
| YH1461:                | Squarewave, CMOS  |
| Harmonics:             | -20dBc (Sinewave version)   |
| Symmetry:              | 50%±10% (Squarewave version)  |
| Temperature Stability: | See table   |
| Freq. vs. Supply:      | ±3x10 <sup>-9</sup> for a 5% change   |
| Ageing:                | ±0.1ppm per year (10MHz)<br>±0.5ppm per year (100MHz)   |
| Input Voltage:         | available in +15.0, +12, +5 & +3.3V   |
| Input Power:           |   |
| Warmup:                | <5W for 5 minutes   |
| Idle:                  | <1.5W typical @ +25°C   |
| Phase Noise:           | See table   |
| Frequency Adjustment:  | ±1.0ppm, typical for 10MHz, Positive slope, 0 to +3.3V or +5.0V EFC   |
| Package:               | See Outline. Improved shock and vibration performance is available with 15.24mm height, (option HS.) The standard height option is 'STD'. |

*Designed and manufactured by Greenray Industries Inc.*

### YH1460 - OUTLINES AND DIMENSIONS



### STABILITY OVER TEMPERATURE

| Temp. Range | 10MHz Stability     | Option | 100MHz Stability    | Option |
|-------------|---------------------|--------|---------------------|--------|
| 0~+50°C     | ±1x10 <sup>-8</sup> | B18    | ±5x10 <sup>-8</sup> | B58    |
| -10~+60°C   | ±1x10 <sup>-9</sup> | G18    | ±7x10 <sup>-8</sup> | G78    |
| -20~+70°C   | ±1x10 <sup>-8</sup> | N18    | ±1x10 <sup>-7</sup> | N17    |
| -40~+85°C   | ±2x10 <sup>-8</sup> | T28    | ±3x10 <sup>-7</sup> | T37    |

### PHASE NOISE

(Typical, at 10MHz, 5.0V)

| Offset | dBc/Hz (10MHz) | dBc/Hz (100MHz) |
|--------|----------------|-----------------|
| 10Hz   | -125           | -90             |
| 100Hz  | -145           | -120            |
| 1kHz   | -155           | -145            |
| 10kHz  | -160           | -155            |
| 100kHz | -160           | -158            |

### PART NUMBERING

Example: **YH1460-N18-5-STD-10.00MHz**

