

Series OCD
14.3 x 9.3 mm Oven Controlled Crystal Oscillator



FEATURE

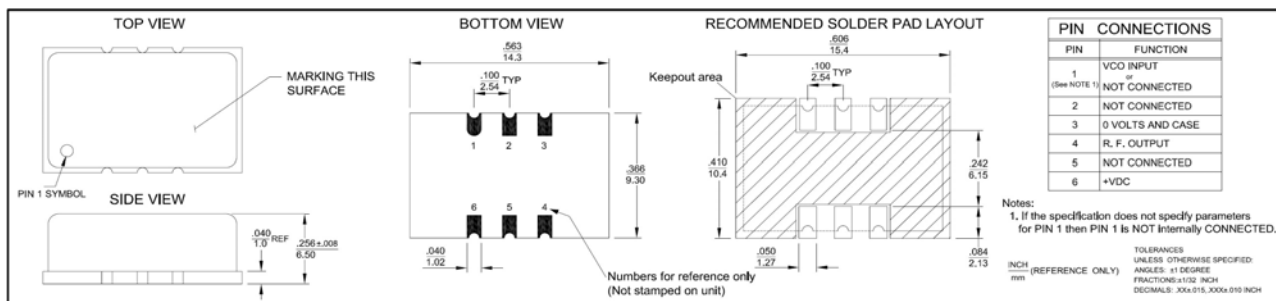
- Dimension 14.3 x 9.3 x 6.5 mm typical..
- Stratum 3 (Overall ±4.6 ppm including 10 years aging.)



TYPICAL APPLICATION

- SDH/SONET, Telecommunication base station
- Test and measurement equipment
- Synthesizer, Digital switch, Reference Timing Circuit

DIMENSION



ELECTRICAL SPECIFICATION

| Parameter | Min. | Typ. | Max. | Unit | Test Condition & Noted |
|---------------|------|-------------|------|------|---|
| Output | | | | | |
| Frequency | | 20 | | MHz | Available frequency range is from 5MHz to 40MHz. Standard Frequencies are 10, 12.8, 15.36, 19.2, 20, 25 and 38.88MHz. |
| Waveform | | Rectangular | | | Sine wave output is available. Consult factory for more information |
| Level | | HCOMS | | | |
| "1" Level | 2.8 | | | V | |
| "0" Level | | | 0.4 | | |
| Load | | 15 | | pF | |
| Duty cycle | 45 | 50 | 55 | % | @+1.65 V |
| Spurious | | | -60 | dBc | |

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| Frequency Stability | | | | | |
|---------------------|-------|-----|-------|--------|---|
| Ambient | -0.1 | | 0.1 | ppm | -40°C to +85°C, referenced to +25°C. Refer to Freq. stability Vs Temp. Range table |
| Aging | -5.0 | | 5.0 | ppb | Per day, at time of shipment |
| Daily | -5.0 | | 5.0 | ppb | after 30 days |
| Yearly | -1.0 | | 1.0 | ppm | |
| 10 years | -4.0 | | 4.0 | ppm | |
| Voltage | -20.0 | | 20.0 | ppb | ±5% change |
| Warm-up | -0.1 | | 0.1 | ppm | In 5 minutes @ +25 °C, referenced to 1 hour |
| Phase Noise | | | -90 | dBc/HZ | @ 10 Hz |
| | | | -115 | | @ 100 Hz |
| | | | -135 | | @ 1kHz |
| | | | -145 | | @ 10 kHz |
| Input Power | | | | | |
| Voltage | 3.135 | 3.3 | 3.465 | V | 5.0V Input voltage is available. Consult factory for Control voltage and output level |
| Current | | | 500 | mA | @ turn on |
| Steady state | | 0.4 | 0.6 | W | @ +25°C |

Packing: Tape & Reel, 500pcs per Reel.

FREQ . STABILITY VS TEMP. RANGR

| Tem.(°C) | ppb | | |
|----------|-----|------|------|
| | ±50 | ±100 | ±200 |
| 0 ~+70 | 0 | 0 | 0 |
| -30 ~+70 | △ | 0 | 0 |
| -40 ~+85 | △ | 0 | 0 |

O: Available △:Conditional X: Not available