



Oven Controlled Crystal Oscillator

OCXO 2051

Features

- High Stability
- Wide Temperature Range
- Fast Warming-up
- Low Phase Noise

| Specifications | | Option Codes |
|------------------------------------|--|--------------|
| Frequency Range: | 50 MHz ~ 120 MHz | |
| Output Waveform: | Sine Wave | S |
| Output Level: | +7 dBm (min.) | |
| Load: | 50 Ω \pm 5% | |
| Harmonics: | -30 dBc (max.) | |
| Spurious: | -70 dBc (max.) | |
| Frequency Tolerance @ 25°C: | \pm 0.1 ppm (max.) | |
| Operating Temperature Range (OTR): | Select from Table 1 | |
| Temperature Stability: | Select from Table 1 | |
| Supply Voltage, Vdd: | +5 V \pm 5% +12 V \pm 5% | 5 C |
| Supply Voltage Stability: | \pm 10 ppb (max.) | |
| Load Stability: | \pm 10 ppb (max.) | |
| Power consumption @ 25°C: | 4.5 Watts (max.) during warm-up 1.5 Watts (max.) at steady-state | |
| Warm-up Time @ 25°C: | 5 minutes (max.) to reach within \pm 100 ppb | |
| Frequency Adjustment Option: | External Control Voltage None (Fixed Frequency) | V N |
| Control Voltage Range: | 2.5 V \pm 2.5 V | |
| Frequency Tuning Range: | \pm 0.5 ppm (min.) | |
| Frequency Tuning Slope: | Positive | |
| Aging @ 25°C: | \pm 5 ppb (max.) per Day \pm 500 ppb (max.) per Year (After 30 days of continuous operation) | |
| Storage Temperature Range: | -55°C to +125°C | |



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Mechanical Specifications

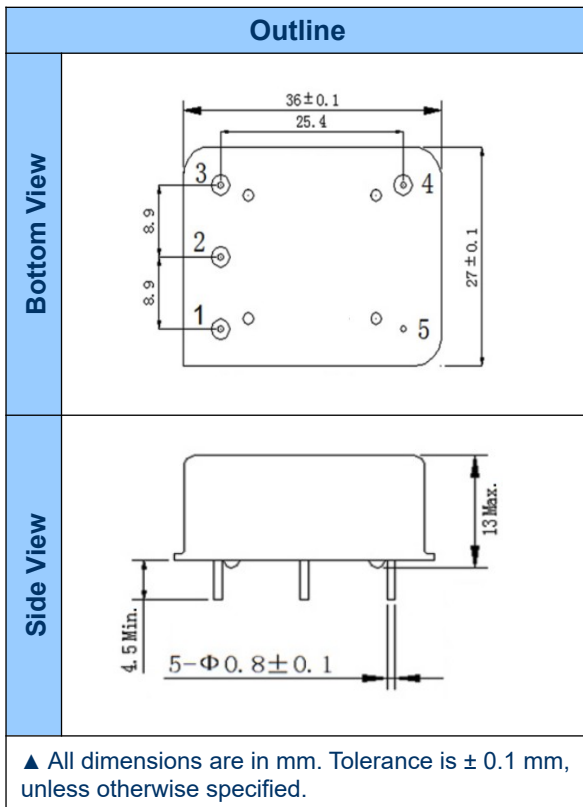


Table 1

| OTR Codes | Stability Codes | | | | |
|-----------|-----------------|----------------|---------------|---------------|---------------|
| | 010 | 050 | W | V1 | X |
| C | ± 0.01 ppm | ± 0.05 ppm | ± 0.1 ppm | ± 0.2 ppm | ± 0.5 ppm |
| I5 | ± 0.01 ppm | ± 0.05 ppm | ± 0.1 ppm | ± 0.2 ppm | ± 0.5 ppm |
| I | ± 0.01 ppm | ± 0.05 ppm | ± 0.1 ppm | ± 0.2 ppm | ± 0.5 ppm |
| K1 | ± 0.01 ppm | ± 0.05 ppm | ± 0.1 ppm | ± 0.2 ppm | ± 0.5 ppm |

Denotes Available Denotes not Available

Typical SSB Phase Noise @ 100 MHz

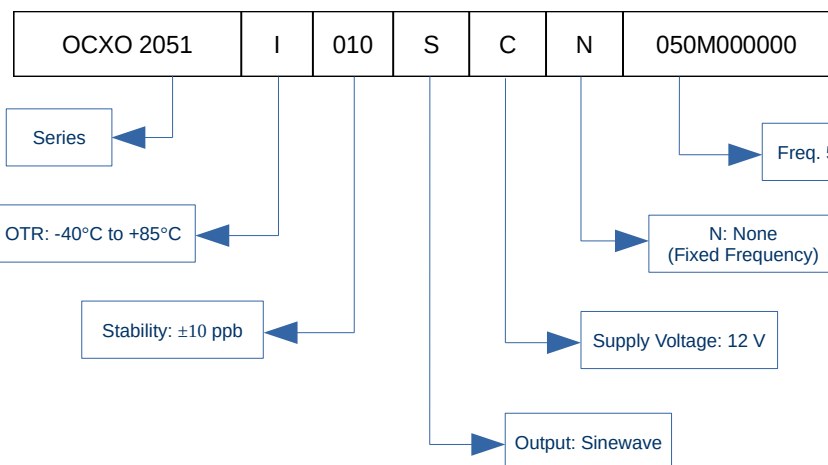
| | |
|----------------|--------------|
| 10 Hz Offset | -100 dBc/ Hz |
| 100 Hz Offset | -130 dBc/ Hz |
| 1 KHz Offset | -145 dBc/ Hz |
| 10 KHz Offset | -150 dBc/ Hz |
| 100 KHz Offset | -155 dBc/ Hz |

Pin Configuration:

| Pin | Description |
|-----|-------------------------------------|
| 1 | Control Voltage/ No Connection |
| 2 | Reference Voltage/ No Connection |
| 3 | Supply Voltage |
| 4 | Output |
| 5 | Ground |

Ordering Information

Example



Specifications subject to change without prior notice

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Note: Not all combination of options are available. Other specifications may be available upon request.

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