# OVEN CONTROLLED CRYSTAL OSCILLATOR

***SC-CUT CRYSTAL*** **OCXO-2055**

## ❑ FEATURE

- High Stability upto 5 ppb
- Standard European IEC CO-08 Pin-out
- SC-Cut Crystal
- Custom Options available
- RoHS Compliant Standard

**Table 1**

| Codes | Stability Codes: Frequency Stability | Temperature Range |
|---|---|---|
| A | 0 to +50° C | |
| B | 0 to +60° C | |
| F | 0 to +70° C | |
| D | -10 to +60° C | |
| E | -10 to +70° C | |
| C | -20 to +70° C | |
| G1 | -30 to +70° C | |
| I5 | -40 to +70° C | |
| I4 | -40 to +80° C | |

**Typical Phase Noise**
**(10 MHz Sine Output)**

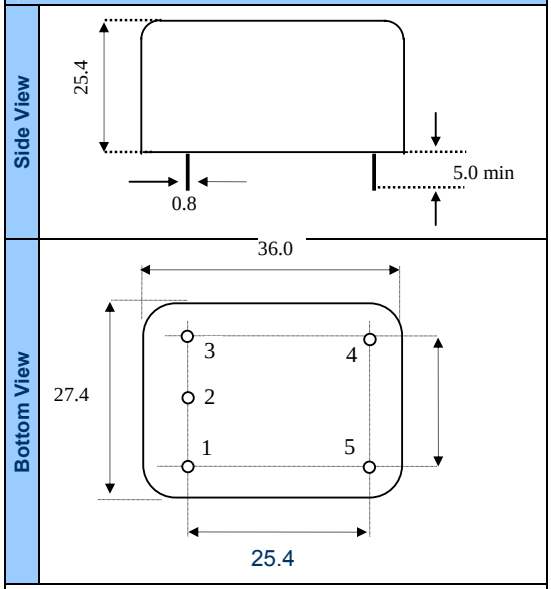
| | |
|---|---|
| 1 Hz Offset | - 90 dBc/Hz |
| 10 Hz Offset | -125 dBc/Hz |
| 100 Hz Offset | -135 dBc/Hz |
| 1 KHz Offset | -150 dBc/Hz |
| 10 KHz Offset | -155 dBc/Hz |

| Parameters | Variant H | Variant T | Variant S | Option Codes |
|---|---|---|---|---|
| **Frequency Range:** | | | | |
| 1 MHz – 30 MHz | ■ | □ | | |
| 5 MHz – 30 MHz | | | ■ | |
| **Output Drive:** | | | | |
| 15 pF HCMOS / TTL | ■ | ■ | | |
| Sine wave | | | ■ | |
| **Output Levels:** | | | | |
| Logic '0' = +0.5V max, '1' = +4.0V min | ■ | | | |
| Logic '0' = +0.4V max, '1' = +2.4V min | | ■ | | |
| 3 dBm( min) into 50Ω | | | ■ | |
| **Rise / fall time:** | | | | |
| 10 ns max | ■ | ■ | | |
| **Waveform symmetry:** | | | | |
| 40:60 max @ 2.5V | ■ | | | |
| 40:60 max @ 1.4V | | ■ | | |
| **Frequency at room temperature:** | | | | |
| ± 0.01 ppm at 25°C±2°C | ■ | ■ | ■ | |
| **Operating temperature range:** | | | | |
| (Table 1) | □ | □ | □ | Specify |
| **Operating temperature stability:** | | | | |
| ± $5x10^{-9}$ | □ | □ | □ | 005 |
| ± $10x10^{-9}$ | ■ | ■ | ■ | 010 |
| ± $20x10^{-9}$ | □ | □ | □ | 020 |
| Other | □ | □ | □ | Specify |
| **Supply voltage (VDD):** | | | | |
| +5.0V DC (±5%) | ■ | ■ | ■ | 5 |
| +12.0V DC (±5%) | ■ | ■ | ■ | C |
| **Supply voltage stability:** | | | | |
| <$1x10^{-9}$ per 5% Change | ■ | ■ | ■ | |
| **Power consumption:** | | | | |
| 5 watts max. during warm-up @ 25°C | ■ | ■ | ■ | |
| 2 watts max. at steady-state @ 25°C | ■ | ■ | ■ | |
| **Warm up time:** | | | | |
| 10 min Max. to ±0.01 ppm @ 25°C | ■ | ■ | ■ | |
| **Ageing:** | | | | |
| ± $1x10^{-9}$ per Day | □ | □ | □ | |
| ± $5x10^{-8}$ per Year | ■ | ■ | ■ | |
| **Frequency adjustment:** | | | | |
| ±0.2 ppm (min.) by Control voltage trim (2.5 V ±2.0 V) | ■ | ■ | ■ | V |
| None | □ | □ | □ | N |
| **Storage Temperature Range:** | | | | |
| -40 to +85° C | ■ | ■ | ■ | |

■ Standard, □ Optional – please specify required code(s) when ordering.

## MECHANICAL SPECIFICATIONS

**Out line**




▲ All dimensions are in mm.

**Pin configuration**

| Pin | Option V | Option N |
|---|---|---|
| 1 | Control Voltage | No Connection |
| 2 | No Connection | No Connection |
| 3 | DC Input | DC Input |
| 4 | Output | Output |
| 5 | Ground | Ground |

**Ordering Information**

**Example**

**2055 C 005 S 5 V X / 10 MHz**

- **Model**
- **OTR** -20 to 70° C
- **Stability** ± $5x10^{-9}$
- **Output** SINE
- **Frequency** 10 MHz
- **Factory setting**
- **Frequency Adjustment** Control Voltage
- **Supply Voltage** 5V

Specifications subject to change without notice
Revision No. 12b of May 2008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