# RCV2520Q

The RCV2520Q Selectable VCXO combines small size and low RMS phase jitter with the ability to select output frequency from one of two factory-configured values. By combining two oscillator specifications into one part, the RCV2520Q can be used to reduce unique part count and provide software-upgradable hardware.

## Features

- Up to four frequency selections in one part
- LVCMOS, LVPECL, or LVDS output options
- 1.0 ps RMS phase jitter (12kHz to 20MHz)
- Wide frequency range
- Fast sample turn around

## Applications

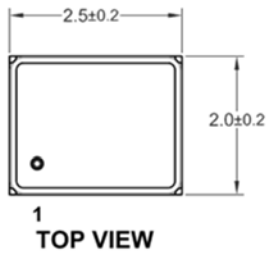
- High Speed ADC/DAC/SERDES
- Broadcast Video
- Radio Systems
- DSL/ADSL
- PON/FTTH

## 2.5 x 2.0 mm

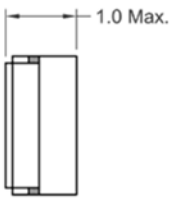

## Standard Specifications

| Parameter | Min. | Typ. | Max. | Unit | Test Condition / Description |
|---|---|---|---|---|---|
| Number of frequency selections | | 2 | | | |
| Nominal frequency 1 | 8 | | 1500 | MHz | Dual: FS0 = 0 |
| Nominal frequency 2 | 8 | | 1500 | MHz | Dual: FS0 = 1 |
| Operating temperature range | -40 | | 85 | °C | |
| Frequency stability | | | ±35 | ppm | Including frequency calibration, operating temperature range, supply and load variations, and 10 years aging at 25°C |
| Total pull range | ±65 | | | ppm | For a control voltage range of 0.3 to 3.0V |
| Supply voltage ($V_{DD}$) | | 2.5<br>3.3 | | V<br>V | With a tolerance of ±5%<br>With a tolerance of ±10% |
| Supply current | | | 30<br>65<br>40 | mA<br>mA<br>mA | For LVCMOS<br>For LVPECL<br>For LVDS |
| RMS phase jitter<br>(Integrated from 12kHz to 20MHz) | | 1.0<br>0.5 | 2.0<br>1.0 | ps<br>ps | <br>For certain configurations |

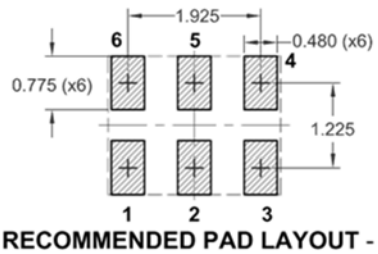
## Model Outline and Recommended Pad Layout



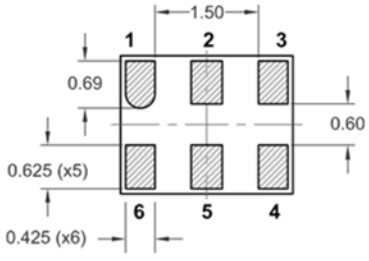

TOP VIEW




SIDE VIEW




RECOMMENDED PAD LAYOUT - TOP VIEW




BOTTOM VIEW

**PIN CONNECTIONS**

| | |
|---|---|
| **1** | Vc |
| **2** | FS0 |
| **3** | GND |
| **4** | Output |
| **5*** | NC (LVCMOS) or<br>Complementary Output (LVPECL/LVDS) |
| **6** | $V_{DD}$ |

* Depending on specifications

**NOTE:**
Outline unit is mm.