

RCX2520Q

The RCX2520Q Selectable XO combines small size and low RMS phase jitter with the ability to select output frequency from one of four factory-configured values. By combining multiple oscillator specifications into one part, the RCX2520Q can be used to reduce unique part count and provide built-in upgrade paths.

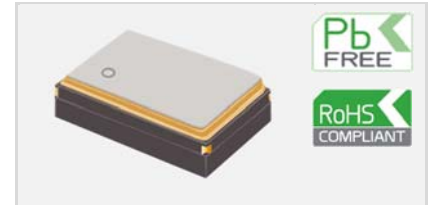
Features

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

Applications

- Ethernet (10G/40G/100G)
- Communications
- Base Stations
- 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		4		2 with E/D, 3 or 4 without E/D function
Nominal frequency 1	8		1500	MHz	Quad: FS1 = 0, FS0 = 0; Dual: FS0 = 0
Nominal frequency 2	8		1500	MHz	Quad: FS1 = 0, FS0 = 1; Dual: FS0 = 1
Nominal frequency 3	8		1500	MHz	Quad: FS1 = 1, FS0 = 0
Nominal frequency 4	8		1500	MHz	Quad: FS1 = 1, FS0 = 1
Operating temperature range	-40		85	°C	
Frequency stability (frequency calibration, temperature range, supply and load variations, and 10 years aging)			±35 ±50	ppm ppm	-20 to 70°C -40 to 85°C
Supply voltage (V _{DD})		2.5 3.3		V V	With a tolerance of ±5% With a tolerance of ±10%
Supply current			30 65 40	mA mA mA	For LVC MOS For LVPECL For LVDS
RMS phase jitter (Integrated from 12kHz to 20MHz)		1.0 0.5	2.0 1.0	ps ps	For certain configurations

Model Outline and Recommended Pad Layout

TOP VIEW

SIDE VIEW

RECOMMENDED PAD LAYOUT
- TOP VIEW

BOTTOM VIEW

PIN CONNECTIONS	
1*	E/D (Dual mode), FS1 (Quad mode)
2	FS0
3	GND
4	Output
5	NC (LVC MOS), Complementary Output (LVPECL/LVDS)
6	V _{DD}

* Depending on the selected frequency mode

NOTE: Outline unit is mm.