EUROQUARTZ

LVDS 5x3.2mm 2.5V VCXO

EQVP-LC52 SERIES

Freq: 0.75MHz to 1.0GHz

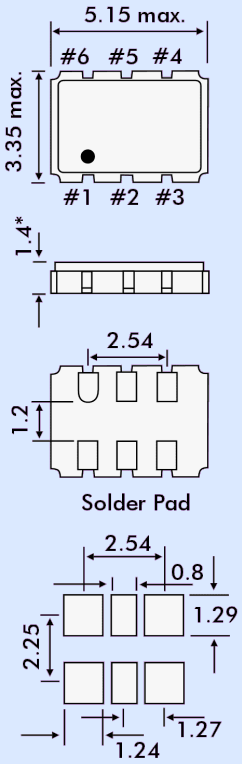
Features

- Extremely low jitter
- Low cost
- Express delivery
- Stability from ±20ppm, -40 to +85°C
- Absolute pull range ±50ppm
- Serial ID with comprehensive traceability

RoHS Compliant



OUTLINE & DIMENSIONS



Pad Connections

1	Enable/Disable
2	Not connected
3	Ground
4	Output
5	Output
6	Vcc

Description

The XPRESSO range of fully configurable VCXOs utilizes a family of proprietary ASICs developed for noise reduction to provide oscillators with noise levels comparable to traditional bulk-produced quartz and SAW-based VCXOs.

XPRESSO VCXOs are low-cost, low-noise, have a wide frequency range, excellent ambient performance and are available on very short leadtimes. All XPRESSO VCXOs are 100% final tested .

Typical applications

- Any application requiring an oscillator.
- SONET
- Ethernet
- Storage Area Networks
- Broadband Access
- Microprocessors/DSP/FPGA
- Industrial Controllers
- Test and measurement
- Fibre Channel

Electrical Specification

Frequency Range:	0.750MHz ~ 1.0GHz
Absolute Pull Range:	±50ppm
Operating Temperature Range:	-20° ~ +70° to -40° ~ +85°C
Storage Temperature Range:	-55 to +125°C
Supply Voltage:	+2.5VDC ±5%
Input Current	
0.75 ~ 20.0MHz:	26mA
20+ ~ 220.0MHz:	34mA
220+ ~ 630.0MHz:	44mA
630+ ~ 1.000GHz:	65mA
Output Load:	100Ω typical
Start-up Time:	10ms
Output Enable/Disable Time:	100ns
Control Voltage Tuning Slope:	40 ~ 75ppm/V typical
Control Voltage Linearity:	±10%
Control Voltage Tuning Range:	0V ~ 2.5V
Modulation Bandwidth:	10kHz minimum
Nominal Control Voltage:	1.25 volts
Differential Output Voltage:	0.4V typical
Output Offset Voltage:	1.25Volts typical
Symmetry:	45/55%
Output Enable (Pad 2) Voltage:	>70% Vdd
Output Disable (Pad 2) Voltage:	<30% Vdd
Rise/Fall Times:	400ps
Moisture Sensitivity Level:	1
Termination Finish:	Au

Supply Format

Tape and Reel, 12mm tape,
8.0mm pitch,
1k reel = 178mmØ
2k reel = 255mmØ

Model Selection Guide

EQVP - L C 5 2 B R - 644.531250

- L = LVDS
- C = Ceramic
- 5 = 5 x 3.2mm
- 2 = 2.5V
- B = ±50ppm Absolute Pull Range
- Blank = -20~+70°C, R = -40 ~ +85°C
- Frequency

Jitter Measurements

Frequency (MHz)	Phase Jitter (12kHz~20MHz) (ps RMS)	Time Interval Error σ of jitter distribution (ps RMS)	Rj/Dj Composition		
			Random Jitter (Rj) (ps RMS)	Deterministic Jitter (Dj) (ps p-p)	Total Jitter (Tj) (14*Rj)+Dj (ps)
62.5	2.12	3.1	1.35	8.4	27.6
156.25	1.04	3.5	1.40	9.2	29.2
212.5	1.35	4.2	1.42	10.9	31.2
622.08	1.30	3.7	1.18	10.4	27.2

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