EURO QUARTZ

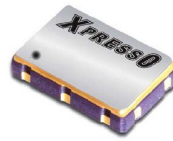# LVDS 7x5mm 3.3V OSCILLATOR

EQXP-LC73 SERIES

Freq: 0.75MHz to 1.35GHz

Features

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

Description

The XPRESSO range of fully configurable oscillators 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 oscillators.

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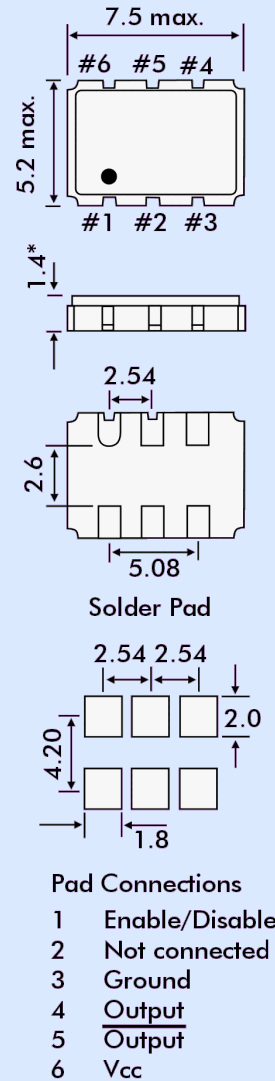
Typical applications

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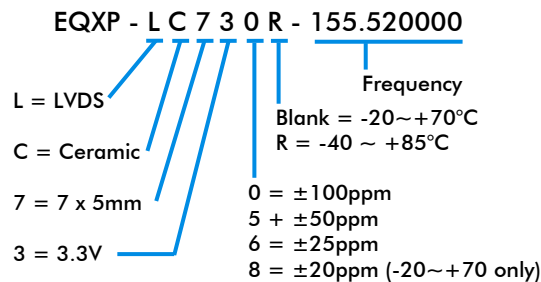- Industrial Controllers
- Test and measurement
- Fibre Channel

OUTLINE & DIMENSIONS

Pad Connections

1	Enable/Disable
2	Not connected
3	Ground
4	Output
5	$\overline{Output}$
6	Vcc

Electrical Specification

Frequency Range:	0.750MHz ~ 1.35GHz
Frequency stability:	from ±20ppm to ±100ppm
Operating Temperature Range:	-40° ~ +85°C
Storage Temperature Range:	-55° ~ +125°C
Supply Voltage:	+3.3 Volts ±5%
Input Current:	100mA
Output Symmetry:	45/55%
Rise/Fall Time:	400ps
Differential Output Voltage:	0.250 Volts ~ 0.450 Volts
Output Offset Voltage:	1.25 Volts typical
Differential Output Swing:	0.35Volts p-p min.
Output Load:	100Ω typical
Start-up Time:	10ms
Output Enable/Disable Time:	100ns
Maximum Soldering Parameters:	260°C for 10 seconds
Moisture Sensitivity Level:	1
Termination Finish:	Au
Supply Format:	Tape and Reel, 16mm tape, 8.0mm pitch, 255mmØ reel

Model Selection Guide

EQXP - L C 7 3 0 R - 155.520000

L = LVDS
C = Ceramic
7 = 7 x 5mm
3 = 3.3V

0 = ±100ppm
5 + ±50ppm
6 = ±25ppm
8 = ±20ppm (-20~+70 only)

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)
106.25	0.83	3.5	0.7	7.1	17.2
156.25	1.28	3.6	1.3	5.8	23.6
212.50	0.89	3.9	0.9	6.7	18.7
622.08	0.99	3.2	1.1	5.3	20.7