EUROQUARTZ

LVDS 5x3.2mm 3.3V OSCILLATOR

EQXP-LC53 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

RoHS Compliant

Description

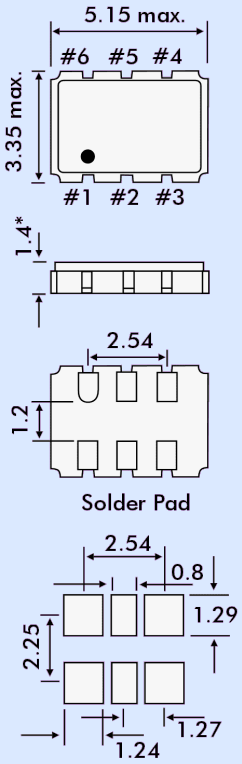
The XPRESSO range of fully configurable oscillators utilizes a family of proprietary ASICs developed for noise reduction to provide oscillators with noise levels comparable to traditional bulk-produced quartz and SAW-based oscillators.

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	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, 12mm tape, 8.0mm pitch, 255mmØ reel

Model Selection Guide

EQXP - L C 5 3 0 R - 155.520000

- L = LVDS
- C = Ceramic
- 5 = 5x3.2mm
- 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	0.82	3.4	1.42	8.7	29.0
156.25	1.19	3.6	1.58	9.5	32.0
212.50	1.13	3.8	1.44	10.0	30.6
622.08	0.96	3.3	1.49	8.5	29.9

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