EUROQUARTZ

LVPECL 5x3.2mm 3.3V OSCILLATOR

EQXP-PC53 SERIES

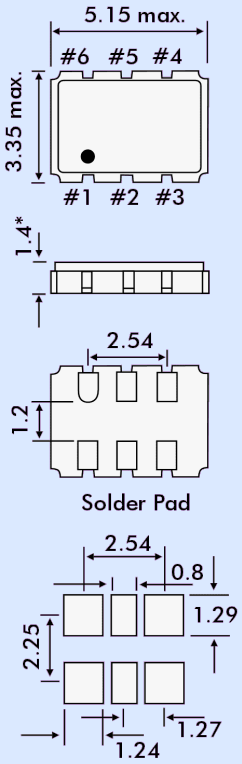
Freq: 0.75MHz to 1.35GHz

Features

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



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 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

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:	120mA
Output Load:	50Ω into Vdd-2VDC, typical
Start-up Time:	10ms
Output Enable/Disable Time:	100ns
Moisture Sensitivity Level:	1
Termination Finish:	Au
Output Low Voltage:	1.305 Volts ~ 1.65 Volts
Output High Voltage:	2.055 Volts ~ 2.405 Volts
Typical Complimentary Difference:	0.750 Volts p-p typical
Output Symmetry:	45/55%
Output Enable Voltage:	>70% Vdd
Output Disable Voltage:	<30% Vdd
Rise/Fall Time:	400ps
Maximum Soldering Parameters:	260°C for 10 seconds
Supply Format:	Tape and Reel, 12mm tape, 8.0mm pitch, 1k reel = 178mmØ 2k reel = 255mmØ

Model Selection Guide

EQXP - P C 5 3 6 R - 622.080000

- P = LVPECL
- 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)
62.5	1.01	3.1	1.27	8.1	26.2
156.25	0.86	3.5	1.29	9.3	27.7
212.50	1.05	3.6	1.22	8.6	26.1
622.08	0.94	3.5	1.21	9.6	26.8

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