EUROQUARTZ

LVPECL 7x5mm 2.5V VCXO

EQVP-PC72 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

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

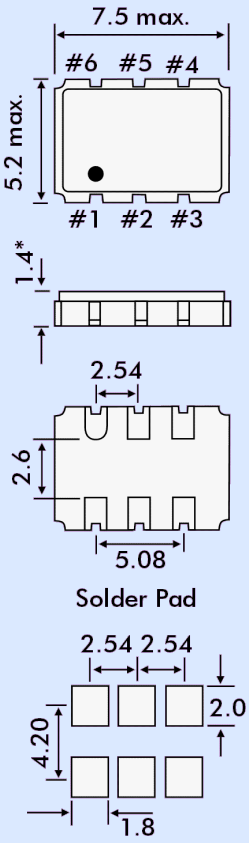
Electrical Specification

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:	33mA
20+ ~ 220.0MHz:	41mA
220+ ~ 630.0MHz:	63mA
630+ ~ 1.000GHz:	72mA
Output Load:	50Ω into Vdd-2VDC 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
Low Output Voltage:	0.68V typical
High Output Voltage:	1.40V typical
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, 16mm tape,
8.0mm pitch,
1k reel = 178mmØ
2k reel = 255mmØ

OUTLINE & DIMENSIONS



Pad Connections

1	Voltage Control
2	Enable/Disable
3	Ground
4	Output
5	Output
6	Vdd

Model Selection Guide

EQVP - P C 7 2 B R - 900.250000

- P = LVPECL
- C = Ceramic
- 7 = 7 x 5mm
- 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	2.10	3.1	1.35	10.5	30.5
156.25	1.20	3.5	1.36	10.0	29.3
212.5	1.27	4.2	1.33	11.8	30.8
622.08	1.68	3.7	1.06	8.3	23.4

EUROQUARTZ LIMITED Blacknell Lane CREWKERNE Somerset UK TA18 7HE
Tel: +44 (0)1460 230000 Fax: +44 (0)1460 230001 Email: info@euroquartz.co.uk www.euroquartz.co.uk