EUROQUARTZ

HCMOS 7x5mm 3.3V OSCILLATOR

EQXP-HC73 SERIES

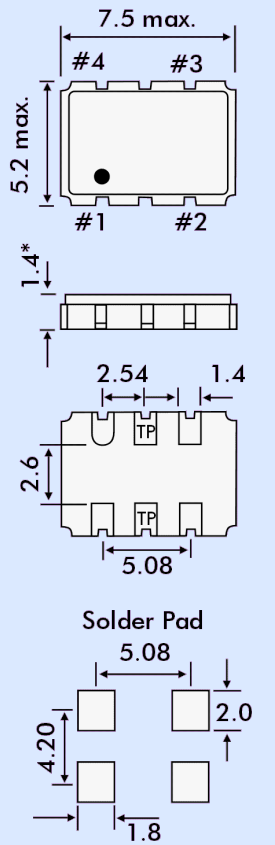
Freq: 0.75MHz to 250MHz

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 Ground
3 Output
4 Vdd

* TP are test points - not connected

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 ~ 250.0MHz
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	
0.75 ~ 20MHz:	32mA max.
20+ ~ 50MHz:	35mA max.
50+ ~ 130MHz:	47mA max.
130+ ~ 200MHz:	55mA max.
200+ ~ 250MHz:	60mA max.
Output Load:	15pF standard 30pF <125MHz available
Start up Time:	10mS
Output Enable/Disable Time:	100ns
Output Low/High Voltages	
0.75 ~ 150MHz:	10%Vdd max./90%Vdd min.
150+ ~ 250MHz:	20%Vdd max./80% Vdd min.
Symmetry:	45%/55%
Rise/Fall Times	
0.75 ~ 150MHz:	3ns
150+ ~ 250MHz:	2ns
Moisture Sensitivity Level:	1
Termination Finish:	Au
Maximum Soldering Parameters:	260°C for 10 seconds

Supply Format

Tape and Reel, 16mm tape, 8.0mm pitch,
1k reel = 178mmØ
2k reel = 255mmØ

Model Selection Guide

EQXP - H C 7 3 6 R - 106.250000

- H = HCMOS
- C = Ceramic
- 7 = 7x5mm
- 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	0.93	2.8	1.28	6.8	25.1
106.25	0.86	3.2	1.28	8.4	26.6
125.0	0.75	2.7	1.20	8.0	25.2
156.25	0.77	3.3	1.27	8.6	26.6

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