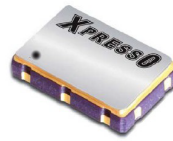


Features

- Extremely low jitter
- Low cost
- Express delivery
- Stability from ± 20 ppm, -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.

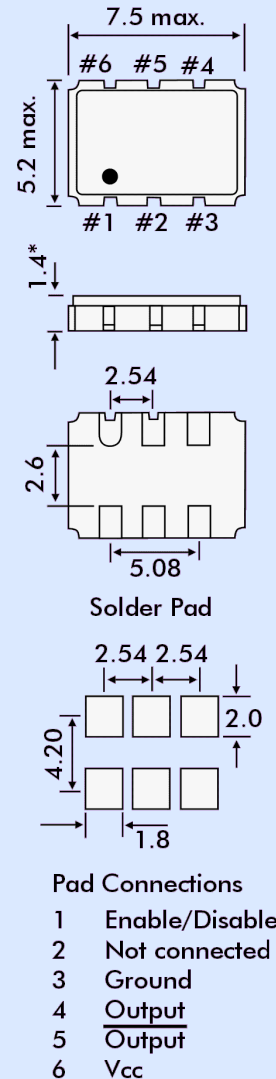
Typical applications

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

Electrical Specification

Frequency Range:	0.750MHz ~ 1.0GHz
Frequency stability:	from ± 20 ppm to ± 100 ppm
Operating Temperature Range:	-40° ~ +85°C
Storage Temperature Range:	-55° ~ +125°C
Supply Voltage:	+2.5Volts $\pm 5\%$
Input Current	
0.75 ~ 20.0MHz:	26mA
20+ ~ 220.0MHz:	34mA
220+ ~ 630.0MHz:	44mA
630+ ~ 1.0GHz:	65mA
Output Symmetry:	45/55%
Rise/Fall Time:	400ps
Differential Output Voltage:	0.4 Volts typical
Output Offset Voltage:	1.25 Volts typical
Output Load:	100 Ω 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

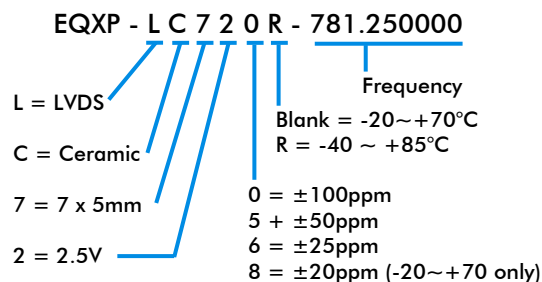
OUTLINE & DIMENSIONS



Supply Format

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

Model Selection Guide



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	2.12	3.1	1.35	8.4	27.6
156.25	1.04	3.5	1.40	9.2	29.2
212.50	0.35	4.2	1.42	10.9	31.2
622.08	1.30	3.7	1.18	10.4	27.2