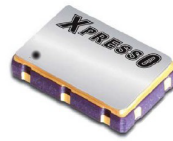


Features

- Extremely low jitter
- Low cost
- Express delivery
- Stability from ± 20 ppm, -40 to +85°C
- Absolute pull range ± 50 ppm
- Serial ID with comprehensive traceability



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 .

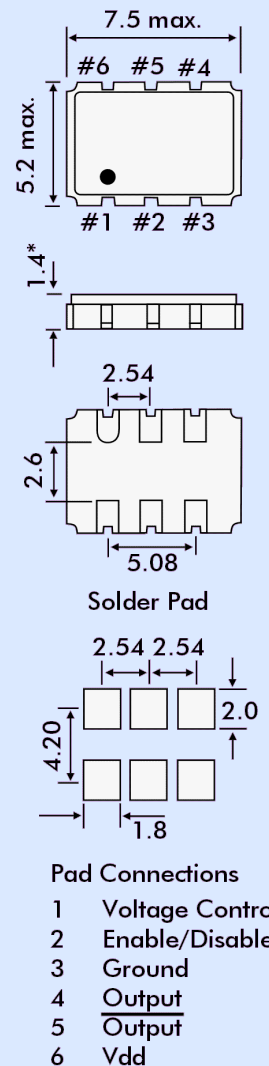
Typical applications

- 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 ~ 1.35GHz
Absolute Pull Range:	± 50 ppm
Operating Temperature Range:	-20° ~ +70° to -40° ~ +85°C
Storage Temperature Range:	-55 to +125°C
Supply Voltage:	+3.3VDC $\pm 5\%$
Input Current:	120mA
Output Load:	100 Ω typical
Start-up Time:	10ms
Output Enable/Disable Time:	100ns
Control Voltage Tuning Slope:	40 ~ 75ppm/V typical
Control Voltage Linearity:	$\pm 10\%$
Control Voltage Tuning Range:	0V ~ 3.3V
Modulation Bandwidth:	10kHz minimum
Nominal Control Voltage:	1.65 volts
Differential Output Voltage:	0.6V typical
Output Offset Voltage:	1.3Volts typical
Symmetry:	45/55%
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

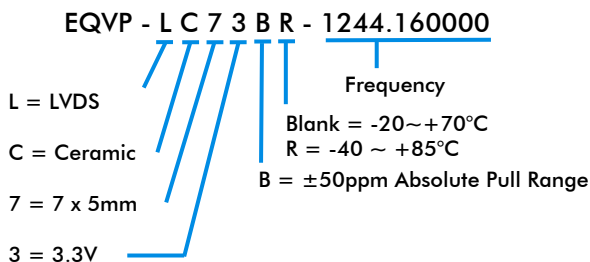
OUTLINE & DIMENSIONS



Supply Format

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

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	0.77	3.0	1.3	7.0	24.9
156.25	1.19	3.6	1.3	5.8	23.6
212.5	0.89	3.9	0.9	6.7	18.7
622.08	0.99	3.2	1.1	5.3	20.7