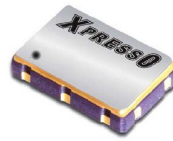


Features

- 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 .

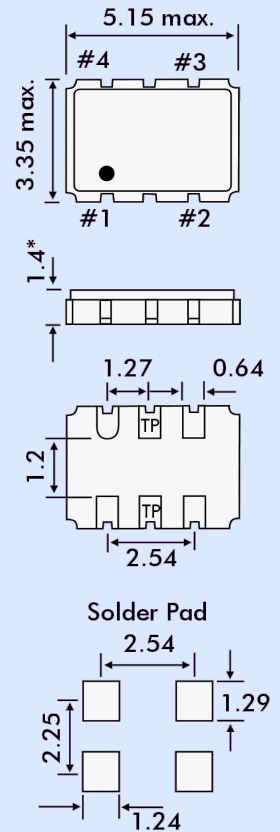
Typical applications

- 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 ~ 250.0MHz
Frequency stability:	from ± 20 ppm to ± 100 ppm
Operating Temperature Range:	-40° ~ +85°C
Storage Temperature Range:	-55° ~ +125°C
Supply Voltage:	+3.3 Volts $\pm 5\%$
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

OUTLINE & DIMENSIONS



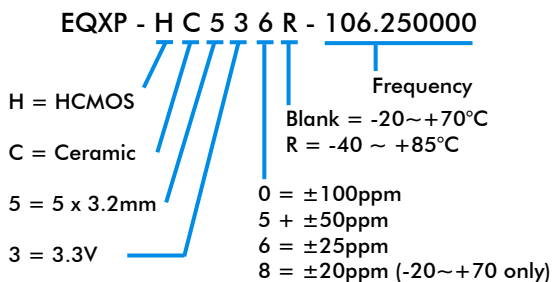
Supply Format

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

Pad Connections

- 1 Enable/Disable
 - 2 Ground
 - 3 Output
 - 4 Vdd
- * TP are test points
- not connected

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	0.93	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