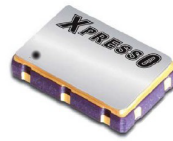


Features

- 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.

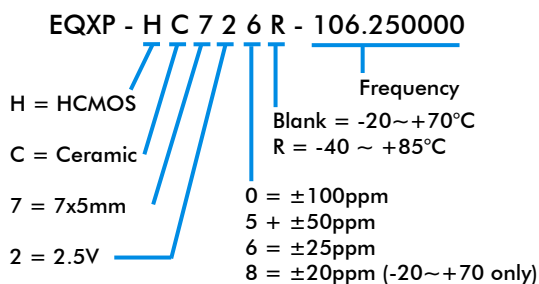
Typical applications

- 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 ~ 180.0MHz
Frequency stability:	from ± 20 ppm to ± 100 ppm
Operating Temperature Range:	-40° ~ +85°C
Storage Temperature Range:	-55° ~ +125°C
Supply Voltage:	+2.5 Volts $\pm 5\%$
Input Current	
0.75 ~ 20MHz:	22mA max.
20+ ~ 50MHz:	25mA max.
50+ ~ 100MHz:	29mA max.
100+ ~ 130MHz:	32mA max.
130+ ~ 160MHz:	35mA max.
160+ ~ 180MHz:	37mA 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%V _{dd} max./90%V _{dd} min.
160+ ~ 180MHz:	20%V _{dd} max./80% V _{dd} min.
Symmetry:	45%/55%
Rise/Fall Times	
0.75 ~ 160MHz:	3.5ns max.
160+ ~ 180MHz:	2.5ns max.
Moisture Sensitivity Level:	1
Termination Finish:	Au
Maximum Soldering Parameters:	260°C for 10 seconds

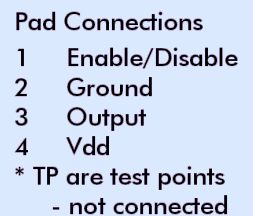
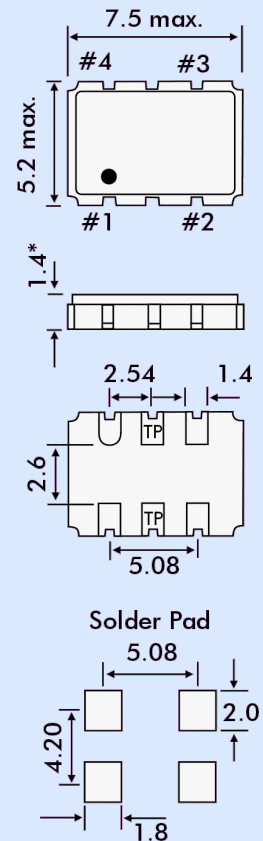
Model Selection Guide



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	2.1	3.1	1.3	8.4	27.6
106.25	1.2	3.5	1.4	8.3	27.7
125.0	1.1	2.7	1.3	6.7	25.6
156.25	0.8	3.7	1.4	9.7	29.5

OUTLINE & DIMENSIONS



Supply Format

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