



# Commercial SPACE

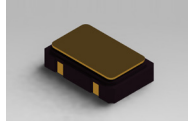
## Oscillators | Crystals

Offering Robust Solutions for Mission Success in Commercial Space •LEO •MEO •GEO  
50 KRad TID: 3.2x2.5, 5x3.2, 5x7 | 1.8V to 5V | CMOS & LVDS

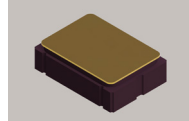
## FREQUENCY MANAGEMENT | International



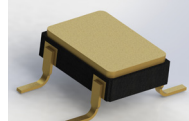
3.2x2.5 SMD



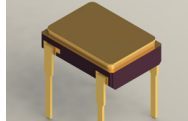
5x3.2 SMD



5x7 SMD

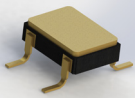


5x7 Gull Wing



5x7 Straight Leads

- FMI commercial space products offer compelling performance and reliability for guaranteed mission success over other commercial, industrial, COTS and automotive grade components while meeting the cost objectives for 6 month to 5 year missions.
- We manufacture all of these very small form-factor and surface mount products on the same DLA approved and MIL-STD-790 certified production line with full control and visibility on the details of configurations and manufacturing processes.
- FMI takes every step in resolving the commercial space deployment risk by providing the best value/performance for the customer required reliability and radiation tolerance plus 100% configuration control and process visibility.
- Our reliable designs directly benefit from the wealth of radiation tolerance and SEE history collected over the years within our fully qualified space grade product line.



### QPL/41 MIL-PRF-55310F

**Smallest | Lightest | Most Robust**  
DLA Qualified Crystal Oscillator  
5x7 mm SMD w/ Gull Wing Leads  
500 KHz to 125 MHz, 3.3V CMOS

*QPL Product Level B with Class K, H or commercial EE Die - offering cost & delivery optimized solutions.*

### Highlights

- Hi-Reliability Ceramic SMD and Ceramic Thru-hole Package Crystal Oscillators
- Output frequencies from KHz range to > 200 MHz range and package dependent
- 50 krad/si or higher based on the TID heritage in space application
- 6 Months to 1 year, 1 to 2 Year and 3 Year to 5 Year Mission Life Options
- Customer selected choice of environmental testing and screening

- SEE options available, please inquire

Take advantage of our experience in classic space missions & our unique capabilities in designing miniature form factor clock solutions in the range of -190°C to +340°C.

[https://www.frequencymanagement.com/html/space\\_SmallSatOscillators.html](https://www.frequencymanagement.com/html/space_SmallSatOscillators.html)

**MIL-PRF-55310**  
**MIL-PRF-38534**  
**MIL-PRF-3098**  
**MIL-STD-790**  
**ISO 9001:2015**

**Series: C55 - 50 Krad**  
**CMOS, 3.3V**  
**Crystal Oscillators to 130 MHz**  
**SEL Options > 75 MeV cm<sup>2</sup>/mg**  
**5 x 3.2 mm Ceramic SMD**



**NEW**

Note, references to MIL-PRF-55310, MIL-PRF-38534, MIL-PRF-3098 relates only to the active device and/or to the device screening.

Check out our C-Series brochure for best performance/value for Small-sat, Cube-sat, Constellation and Nano-Sat missions. C-Series offers the smallest SMD package sizes and adaptable to TID range to 150 Krad/Si.

## FrequencyManagement.com

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FMI Commercial Space Products Brochure

