

# Mtron<sup>TM</sup>

Crystals, Oscillators, Filters and RF Solutions



## Guided Weapons

## Mission Proven Crystals, Oscillators, Filters and RF Solutions for Over 60 Years

Mtron is a proven market leader for phase and amplitude matched filter products and tight stability, low phase noise and low aging crystals and oscillators. As a fully integrated design and manufacturing organization, Mtron has an established team and track record to meet ground, shipboard and airborne guided weapons requirements.

### Partners:

- Raytheon Technologies Corp.
- Northrop Grumman Corp.
- Lockheed Martin Corp.
- Thales Group
- BAE Systems
- MBDA

**bsi.**



### Certificate of Registration

QUALITY MANAGEMENT SYSTEM - AS9100D AND ISO 9001:2015

This is to certify that:

M-Tron Industries Inc.  
1703 E. Highway 50  
Yankton  
South Dakota  
57078  
USA

**bsi.**



### Certificate of Registration

QUALITY MANAGEMENT SYSTEM - AS9100D AND ISO 9001:2015

This is to certify that:

MtronPTI  
2525 Shader Road  
Orlando  
Florida  
32804  
USA

Holds Certificate No:

**FM 690357**

and operates a Quality Management System which complies with the requirements of AS9100D (technically equivalent to EN9100:2018 and ISO 9001:2015) and is assessed in accordance with AS9104/1 for the following scope:

Designer and manufacturer of radio frequency components and assemblies used in defense, aerospace, avionics, instrumentation, telecommunications, industrial, medical and space applications.

For and on behalf of BSI:

*Carlos Pittman*  
Carlos Pittman, Chief Operating Officer - Assurance - Americas

Original Registration Date: 2013-06-20  
Reissue Date: 2022-06-20

Issue Date: 2022-06-20  
Expiry Date: 2025-06-19



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A Member of the BSI Group of Companies.

**M 579007**

which complies with the requirements of AS9100D (technically 16) and ISO 9001:2015 and is assessed in accordance with AS9104/1

quartz crystals, oscillators and custom built thick film hybrids, 32 crystals and oscillators for resale.

*Carlos Pittman*  
Carlos Pittman, Managing Director - Assurance, Americas

Issue Date: 2024-01-13  
Expiry Date: 2027-01-12

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or 7805321 at 389 Chiswick Road, London W4 4AL, UK.  
Suite 800, Herndon, VA 20170-6007 USA +1 703 437 9000

## Our Guided Weapons Advantage

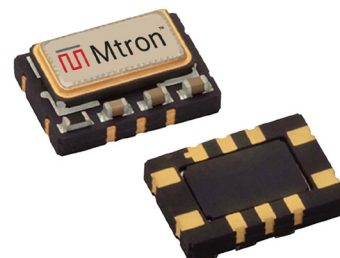
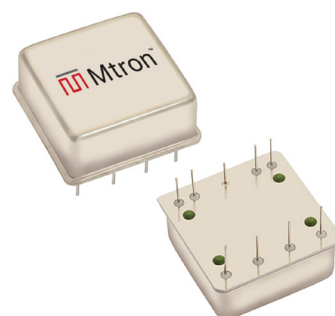
Mtron offers standard and custom products that meet flexibility, performance and reliability requirements for all guided weapons needs.

### Capabilities:

- Phase and amplitude matched filters
- Wide temperature, low phase noise oscillators
- Lead attach capability for 5 x 7mm ceramic package
- Ultra lightweight and compact RF Solutions
- Low intermodulation performance
- Very low insertion loss
- Low phase noise, tight stability and low aging TCXOs

### Product Lines:

- Crystal filters to 200 MHz
- LC filters to 6 GHz
- Cavity/ Waveguide filters to 30 GHz
- Planar Filters from 1.5 GHz to 20 GHz
- N-plexers and switched filter banks
- Precision resonators to 200 MHz
- VCXOs and TCXOs to 1.4 GHz
- Tunable Filters
- LNAs
- SSPAs
- RF Solutions



Our expert team of Engineers, Program Managers, Assemblers and Testers know the demands of Guided Weapons applications and the discipline required to deliver high performance and highly reliable products.

## In House Testing

- Fine Leak Testing - Helium per MIL-STD-202, Method 112
- Gross Leak Testing per MIL-STD-202, Method 112
- Random Vibration per MIL-STD-202, Method 214A
- Sinusoidal Vibration per MIL-STD-202, Method 201 and 204
- Mechanical Shock per MIL-STD-202, Method 213
- Thermal Shock per MIL-STD-202, Method 107
- Terminal Strength per MIL-STD-202, Method 211
- PIND (Particle Impact Noise Detection) per MIL-STD-202, Method 217
- Other Miscellaneous Testing including: Life, Immersion, Humidity, Barometric Pressure and Solderability
- Dielectric Withstanding Voltage and Insulation Resistance

## Production Capabilities

- Phase and Amplitude Matched Filter Sets
- Automated Intermodulation Testing
- Lead Attached 5x7mm package
- In house Crystal Processing
- World-class FOD Control
- Laser Weld

## Workmanship Standards

- In-house J-STD-001 Certified Trainer
- J-STD-001 Class 2 and 3

## Full DC and RF Testing

- RF Testing 100 kHz to 40 GHz
- In-house Power Testing



**WE KNOW GUIDED WEAPONS**

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