



Crystals, Oscillators, Filters and RF Solutions



Planar Filters

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

Mtron brings 60 years of expert high frequency design and manufacturing experience to our Custom Planar Filter product line. Employing our AS9100D operations, Mtron is designing and manufacturing Planar Filters from 1.5 GHz to 20 GHz that support the Aerospace, Defense, and Avionics markets.

### Applications:

- Radar
- Munitions
- EW/SIGINT
- SATCOM
- Communication
- Avionics

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 JISQ 9100:2016) 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 Pitanga, 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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Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PR.  
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
Managed by BSI Group America Inc., 12950 Westgate Drive, Suite 800, Herndon, VA 20170-6007 USA +1 703 437 8000  
A Member of the BSI Group of Companies.

FM 579007

system which complies with the requirements of AS9100D (technically equivalent to EN9100:2018 and JISQ 9100:2016) and is assessed in accordance with AS9104/1

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

Carlos Pitanga, Managing Director - Assurance, Americas

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

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aerospace  
sector  
certification  
scheme

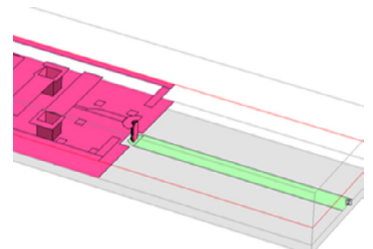
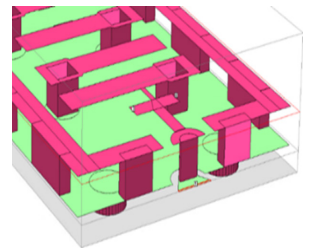
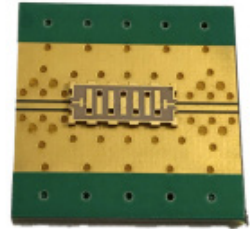
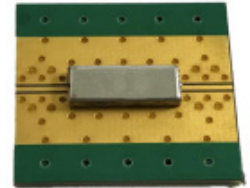
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## Our Planar Filter Advantage

Mtron has launched the design and manufacture of thin film planar filters utilizing interdigital, combline, hairpin, edge-coupled, and end-coupled topologies. The low loss and high dielectric substrates used in the manufacturing process enable a small surface mount footprint and a low profile of less than 0.080 inches high. Customization of these filters for specific applications is possible due to the flexible nature of the design and manufacturing process.



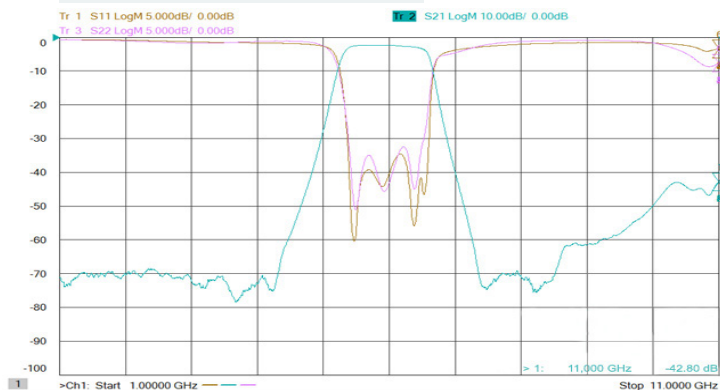
### Features:

- **Excellent SWaP-C**
- **Substrate Materials: Quartz, Alumina, Titanate based high dielectric ( $\epsilon_r > 30$ )**
- **Low insertion loss (<1.5 dB)**
- **High and low side rejection (>60 dB)**
- **Typical package size: less than 0.5" L x 0.2" W x 0.08" H**
- **Bandwidth 2 to 50%**
- **Thin film gold - 5 microns nominal**
- **RF Shielded - silver or nickel plating**
- **Special conformal coating**
- **Excellent temperature stability <5ppm/°C**
- **Standard and extended operating temperatures available**
- **Designed for harsh environments**
- **100% testing before shipping**

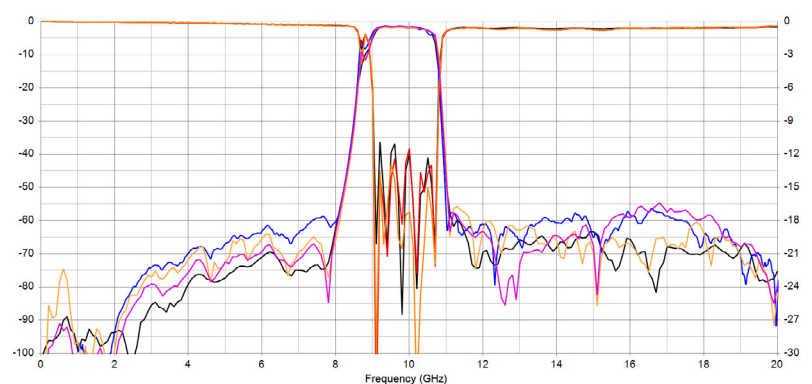
## Planar Filters for High Performance Applications

Mtron has a team of experts who understand and are committed to developing Planar Filter products for applications that require high performance and high reliability. This includes rigorous testing and quality control procedures throughout the design and manufacturing process.

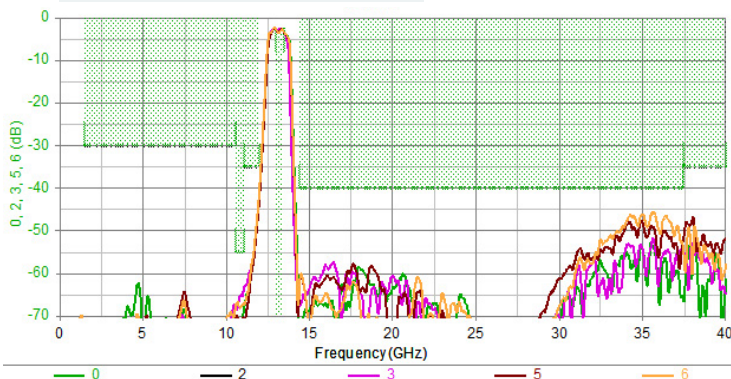
UPF9898 (5.5 - 6.5 GHz)



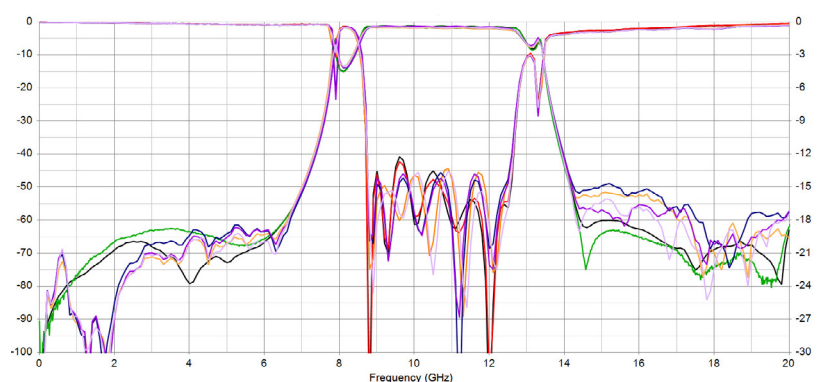
UPF10294 (9.5 - 10.5 GHz)



UPF10263 (12.95 - 13.45 GHz)



UPF10284 (9 - 12.5 GHz)



**WE KNOW PLANAR FILTERS**

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