Multilayer Organic (MLO®)

MLO™ TECHNOLOGY

The MLPS0250A700 is a best in class low profile multilayer organic passive device that is based on AVX's patented multilayer organic high density interconnect technology. The MLO™ MLPS0250A700 uses high dielectric constant and low loss materials to realize high Q passive printed elements such as inductors, and capacitors in a multilayer stack up to result in a 100 Ohm balanced Low Pass Filter Design.

APPLICATIONS

- Satellite receivers
- Satellite transmitters

LAND GRID ARRAY ADVANTAGES

- Inherent Low Profile
- Excellent Solderability
- Low Parasitics
- Excellent Heat Dissipation

HOW TO ORDER

MLPS	0250	A	7	00
Series Band Pass Filters	**Frequency In MHz**	**Standard Testing**	**Termination** 7 – Gold	**Package Code** 00 – Waffle Pack

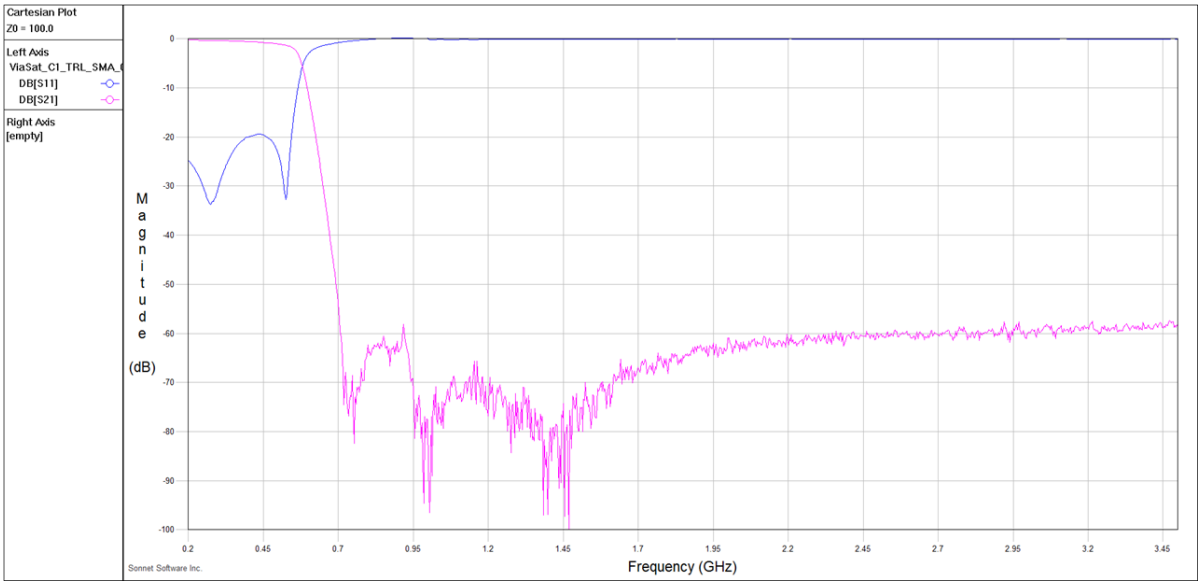
LEAD-FREE
LEAD-FREE COMPATIBLE COMPONENT
RoHS COMPLIANT
For RoHS compliant products, please select correct termination style.

ELECTRICAL SPECIFICATION

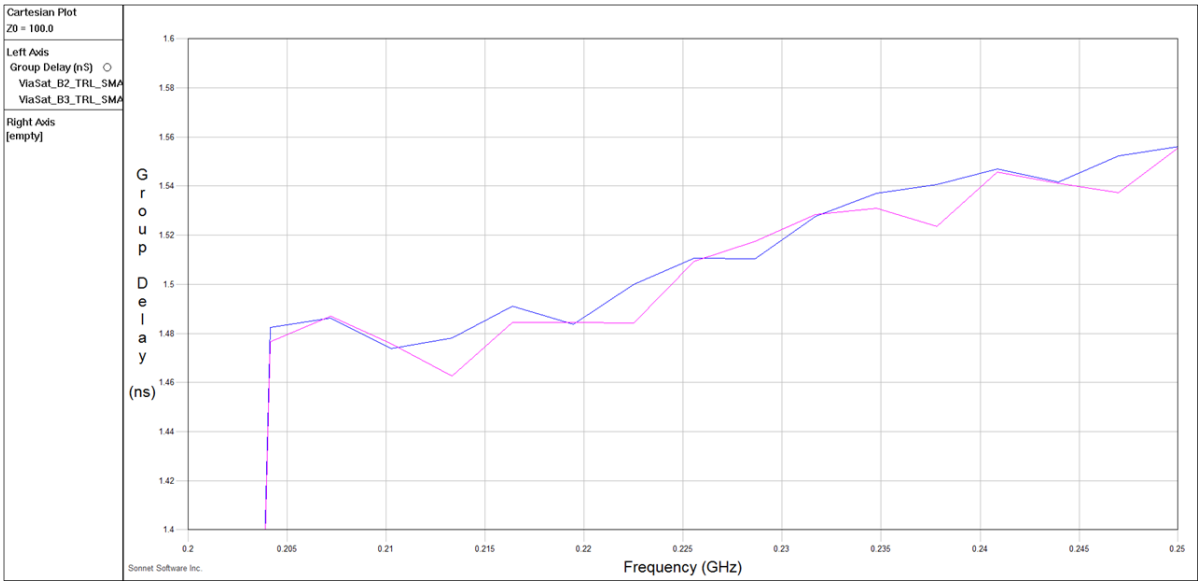
TX I and Q Low Pass-Filter Compliance Table		
	Spec	Measured
Filter Impedance	100 Ohm Balanced I/O	100 Ohm Balanced I/O
Required Bassband BW	DC-250MHz	DC-250MHz
Amplitude Response		
Slope	0.40 dB	0.35
Ripple	0.15 dB	0.00
Min Rejection (0.75-3.5GHz)	55 dB	58 dB
I/Q Filter Group Delay	2.4 nSec	1.57 nSec
I to Q Group Delay Difference	22.20 pSec	5.2 pSec (Band Avg)

TYPICAL SPECIFICATION

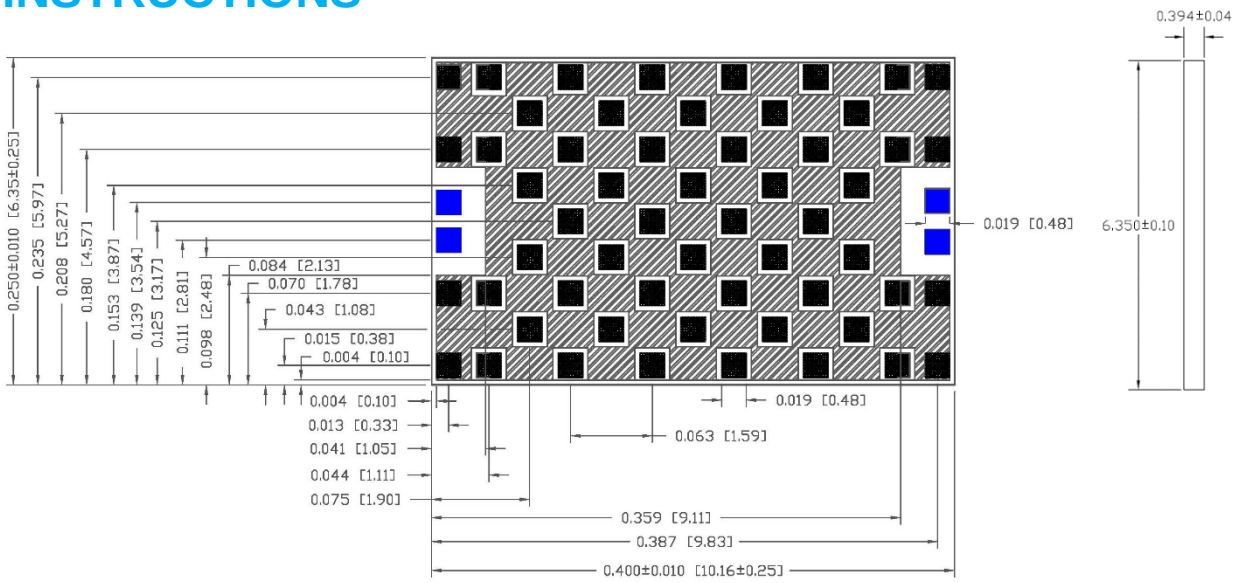
S-Parameter Measured Data



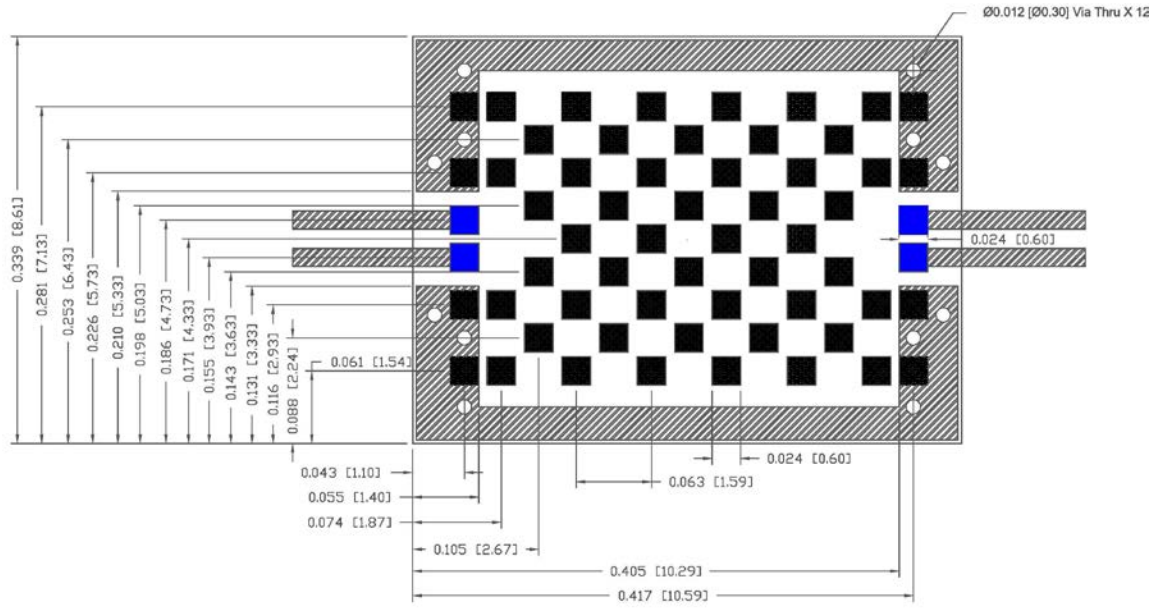
Group Delay



COMPONENT DIMENSIONS & MOUNTING INSTRUCTIONS



Dimensions in inches [mm]
Tolerances are +/-0.002 [0.05], unless noted.
Dimensions nominal unless otherwise noted.



Dimensions in inches [mm].
Line width for I/O pads should be designed to match 50-ohm characteristic impedance, depending on PCB material and thickness.
Grounding is solid copper under solder mask, with solder mask defined pads for ground openings. I/O pads are not shorted to ground.
DXF Files available upon request.