



MtronPTI's K-band diplexer, the UFDX9999-008, is one product of a broad portfolio of products that support Common Data Link (CDL) applications. MtronPTI's oscillators, filters, multiplexers and integrated assemblies enable secure, wideband, real-time uplink and downlink transmission of payload control and sensor data via a CDL. Products features include superior channel to channel isolation, low insertion loss, small size and in many cases high power handling. MtronPTI has successfully designed and delivered microwave filters and integrated microwave assemblies into numerous CDL applications and is advancing the technology daily. These products are qualified on datalinks for space, manned and unmanned aircraft, on the move and fixed ground stations, shipboard, beyond the line of site wideband satellite communications and ground unmanned vehicle markets.

MtronPTI offers a broad line of precision crystal resonators, oscillators, filters, and Integrated Microwave Assembly solutions. MtronPTI is an ISO 9001:2015 and AS9100 Rev. D certified organization

Features:

- Low Noise Figure
- Highly Selective
- High band to band Isolation
- World class SWaP
- High Power Handling
- Modular Solutions

Applications:

- UAS
- Satcom
- Electronic Warfare





MtronPTI Product Portfolio for Common Data Links (CDL)

Frequency Band	Topology	Part#	Pass band(s)	IL (dB, max)	RL (dB, min)	Rejection (dB, min)	Power (W,CW)	Dimensions (inch, max)	other specifications
L	Filter	LF1122-001	1.35 - 2.11 GHz	1	14	@0 to 900MHz: 30 @2700 to 6330MHz: 60 @6330 to 10550MHz: 50	50	1.900" x 0.500" x 0.500"	275W Max. (50% Duty Cycle, 500uSec pulse width)
LS	Diplexer	UFDX1144-001	Band 1: 1.7 - 1.8 GHz Band 2: 2.32 - 2.42 GHz	1	15	Band to Band Isolation : 70	30	4.000" x 3.000" x 1.000"	
	Triplexer	UFTX1144-002	Band 1: 2.02 -2.12 GHz Band 2: 1.70-1.80 GHz Band 3 : 2.20 - 2.30 GHz	0.8	18	Band to Band Isolation : 70	30	6.900" x 5.200" x 1.750"	
S	Diplexer	LF2244-002	3.975 - 4.075 GHz	1.8	14	@ 500 MHz to 3200 MHz: 40 @ 7900 MHz to 13000 MHz: 40	1	1.000" x 0.500" x 0.350"	-
C	Filter	LF4488-001	5.325 - 5.525 GHz	1.8	14	@ 500 to 4500 MHz: 40 @10700 to 16500 MHz: 40	1	1.000" x 0.500" x 0.350"	
	Diplexer	UFDX4488-002	Band 1: 4.4 - 4.65 GHz Band 2: 4.75 - 5.0 GHz	1	15	Band 1: 80 dB above 4.738 GHz Band 2: 80 dB below 4.662 GHz	50	4.500" x 2.500" x 1.000"	Cross over isolation : >40dB
	IMA	UFDX9999-002	Band 1 : 6.67 - 7.07 GHz Band 2: 7.32 - 7.92 GHz	4	15	@5000 to 5800MHz : 50 @9000 to 12000MHz : 50	30	3.800" x 2.500" x 1.250"	Diplexer splitter assembly. Isolation between the bands 70dB
LSC	Quadruplexer	UFQXLS12	Band 1 : 2.00 - 2.7 GHz Band 2 : 3.00 - 3.90 GHz Band 3 : 4.20 - 4.95 GHz Band 4 : 5.25 - 6.00 GHz	1.5	12	Band to Band Isolation : 80	80	5.120" x 2.740" x 1.200"	
X	Diplexer	UFDX8012-001	Band 1: 9.71 - 9.99 GHz Band 2: 10.10 - 10.50 GHz	1	15	Band to Band Isolation : 81	50	4.070" x 3.240" x 0.700"	
Ku	Filter	UF10081	15.150 - 15.350GHz	4	15	14400-14830MHz : 80dB	1	2.160" x 1.440" x 0.650"	
	Diplexer	UFDX9999	Band 1: 14.4 - 14.83 GHz Band 2: 15.15 -15.35 GHz	1	15	Band to Band Isolation : 80dB	50	2.930" x 2.810" x 0.625"	
	Diplexer	UFDX9999-001	Band 1: 14.4 - 14.83 GHz Band 2: 15.15 -15.35 GHz	1.5	15	Band to Band Isolation : 70dB	10	2.300" x 1.220" x 0.600"	
	Diplexer	UFDX9999-005	Band 1: 14.4 - 14.83 GHz Band 2: 15.15 -15.35 GHz	1	15	Band to Band Isolation : 110dB	50	3.070" x 2.240" x 0.600"	
	IMA	IMA-005	Band 1: 14.4 - 14.83 GHz Band 2: 15.15 -15.35 GHz	2	15	Band to Band Isolation : 125dB	100	9.000" x 7.000" x 4.000"	IMA Noise Figure : <3.8dB IMA Harmonic Suppression : 2nd -70dB, 3rd -25dB. Diplexers integrated with switches, LNA and user interface for switching between channels.
	Diplexer	UFDX9999-006	Band 1 : 15.55 - 16.00 GHz Band 2: 16.45 - 16.90 GHz	1.5	15	Band to Band Isolation : 70dB	10	3.000" x 2.000" x 0.600"	
K	Diplexer	UFDX9999-007	Band 1 :21.2 - 21.55 GHz Band 2: 21.75 - 22.10 GHz	2	15	Band to Band Isolation : 70dB	10	3.000" x 2.000" x 0.600"	
	Diplexer	UFDX9999-008	Band 1 : 22.55 - 23.00 GHz Band 2: 23.20 - 23.65 GHz	2	15	Band to Band Isolation : 70dB	10	2.600" x 2.000" x 0.600"	

Contact factory for custom frequency bands, Ka and V band products

