



2525 Shader Road, Orlando Florida 32804 USA  
Phone: 407-298-2000 Fax: 407-293-2979  
Website: mtronpti.com NYSE MKT: LGL

## Specification for a Ku-Band 50W Diplexer MtronPTI P/N: UFDX9999

Using over 50 years of high performance RF filter design and manufacturing experience – incorporating RF CAD design and synthesis, MtronPTI can provide Ku Band high power diplexers. These diplexers incorporate highly selective high power handling bandpass filters for simultaneous transmit and receive operation with outstanding isolation between uplink & downlink feeds.



**Features:** Extremely low TX and RX signal loss, Better Isolation/RF Shielding

**Applications:** Satcom, Electronic Warfare

### Representative Performance Characteristics:

**Passband1** Frequency Range: 14.4GHz to 14.83GHz

**Passband2** Frequency Range: 15.15GHz to 15.35GHz

Insertion Loss (IL):  $\leq 1.0$ dB

Return Loss all ports :  $> 15$ dB

Group Delay Variation: 1.5nS p-p max over any 49MHz within Passband

Isolation:  $\geq 80$ dB

RF Impedance All ports: 50 ohms

Maximum Power Handling of 50W CW

### General Specifications:

Operating Temperature:  $-55^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$

Altitude: 42k Feet

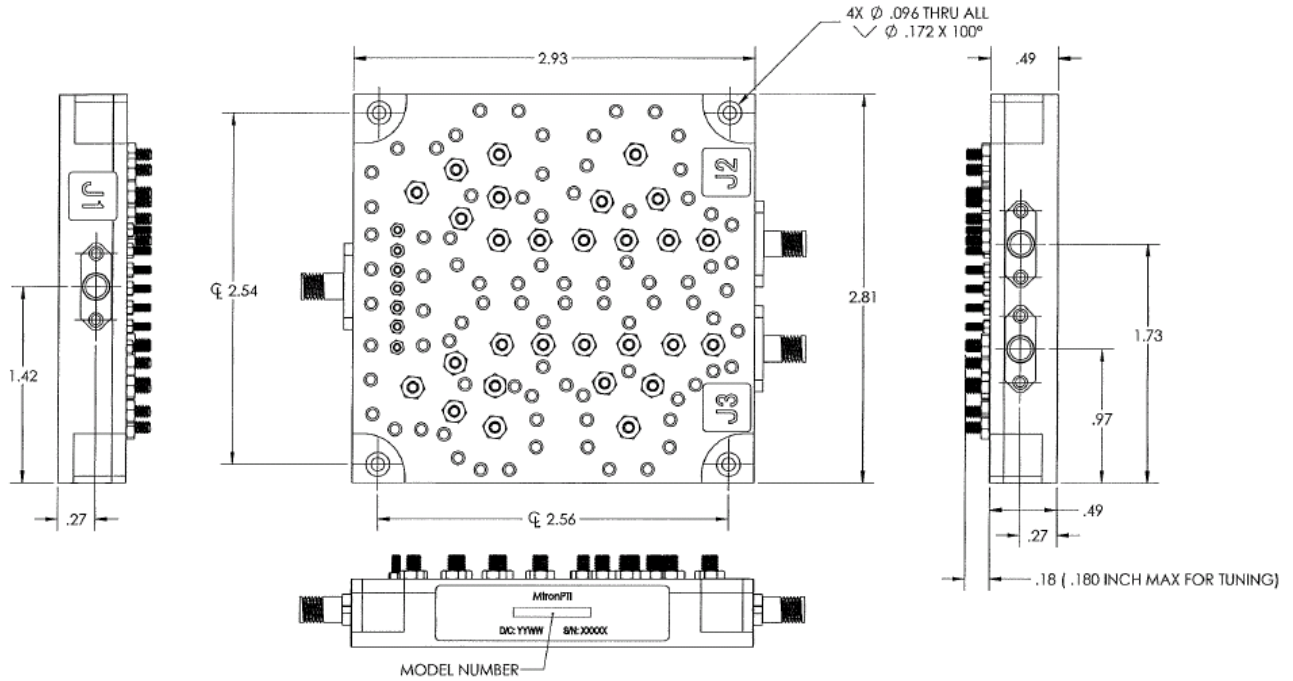
Weight:  $< 175$  grams

Tolerance: .XX+/- .01, .XXX+/- .005

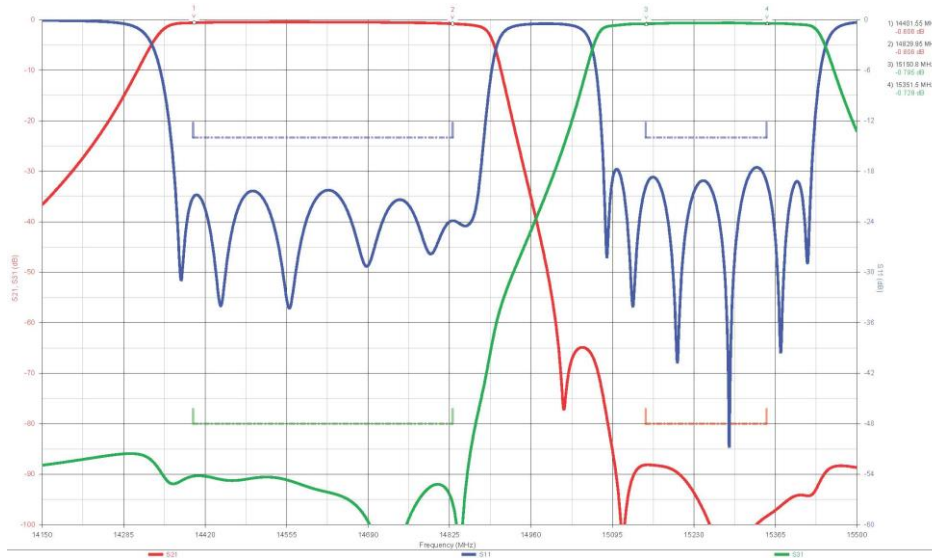


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### Simulations



Date	Rev.	Author	Details of Revision
04-22-18	A	DPD	Original Release