

MtronPTI is pleased to introduce a C-band Diplexer/Splitter Assembly to support rugged, high-performance communication links that require full duplex operation in airborne, land, maritime and deep space applications†. The Diplexer/Splitter Assembly incorporates highly selective bandpass filters and a splitter for simultaneous transmit and receive with full duplex operation, low loss and outstanding isolation between uplink and downlink bands.

Features:

- Integrated assembly with splitter : Board Space Savings
- Low Uplink and Downlink Signal Loss
- >70dB Isolation
- Small Size
- Low weight

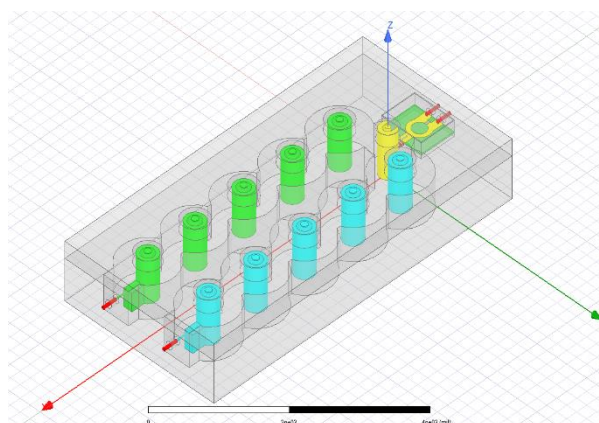
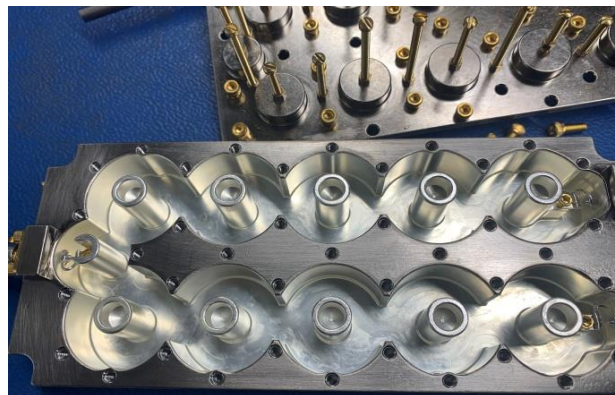
Applications:

- UAS
- Satcom
- Electronic Warfare Datalinks
- Deep Space Satellite Communication Links

† : MtronPTI has a heritage with space level filter assemblies and supports full space level qualification requirements



Operational Bandwidths	Uplink Band = 6670-7070MHz Downlink Band = 7320-7920 MHz
Insertion Loss	4dB maximum; Includes splitter loss
Passband Ripple	0.1 dB max.
Rejection: 5000 to 5800MHz and 9000 to 12000MHz	>= 50dB
Power Handling	10W CW RF power
Duplexer Isolation	>=70dB
Power Divider Isolation	>= 25dB
VSWR	1.45 max.
Phase Balance	6 degrees max.
Weight	0.4kg max.
Dimensions	3.8" (W) x 2.5" (L) x 1.25" (H) max.
External Surfaces	Nickel Plated
Mounting Provisions	Supports custom provisions
Coplanarity of bottom surface	0.010 inches max.
RF Connectors	Female SMA, other options available
Operating temperature	Custom operating temperatures available



C-Band Diplexer/Splitter Assembly Representative Simulations

