

Miniature Triplexer

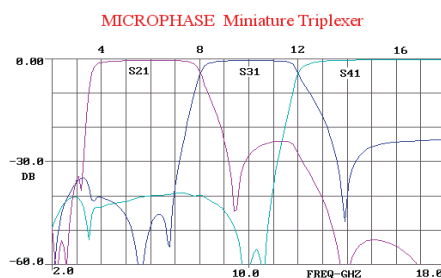
Frequency Range of 4 to 16 GHz

Crossovers at 8 and 12 GHz

Smaller Size

Lighter Weight

Improved Performance



SPECIFICATIONS

Frequency Range

Crossover Frequencies f_{CO}

Passbands

Channel 1	4-8 GHz
Channel 2	8-12 GHz
Channel 3	12-16 GHz

Passband Insertion Loss 0.5 dB

Crossover Insertion Loss 4.25 dB

Crossover Region $\pm 5\%$

Rejection

Channel 1	25 dB
Channel 2	25 dB
Channel 3	25 dB

VSWR 1.8:1 max.

Size (excluding pins) 1.25" L x 1.25 W" x 0.2 H"

Connectors Pins

Weight 0.5 oz.



DESCRIPTION With the ever-increasing demand for smaller size, lighter weight and improved performance filters and multiplexers used aboard UAV's, Microphase Corporation has developed a family of products operating in the frequency range of 500 MHz to 40 GHz to accommodate the need.

ADVANTAGES The Miniature Triplexer which operates over the frequency range of 4 to 16 GHz with crossovers at 8 and 12 GHz. Critical parameters to the performance of this product are minimal Insertion and Crossover Loss while maintaining 25 dB rejection in the absolutely smallest size and weight available.

The size of the unit excluding the pins is 1.25" long by 1.25" wide by 0.25" high. The Triplexer weighs only 0.5 ounces. The plot depicts the filter response of each channel at 10 dB per division making it hard to see the very low 0.5 dB pass band insertion loss and 4.25 dB crossover insertion loss desired for improved receiver sensitivity. You get excellent electrical performance, mechanical reliability and environmental stability. These units can be adapted for custom configurations. Compact and very rugged, all of our products are 100% tested, and readily available.

Multiplexers

These units can be designed to your specification. Please contact Microphase for your special design requirements.