

Ferrite Waveguide Multiplexer

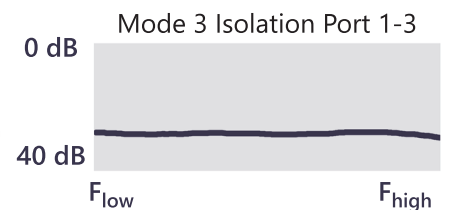
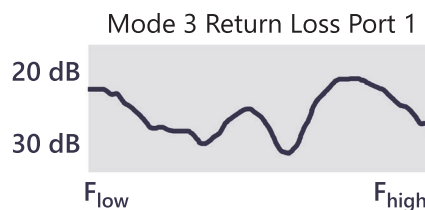
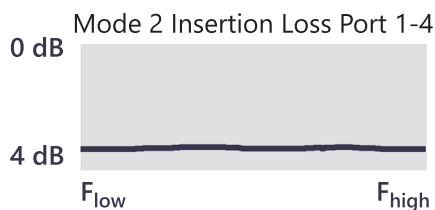
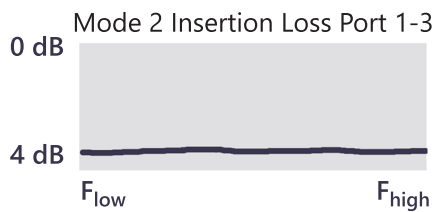
Reconfigurable
High RF Power
Low Insertion Loss

Ferrite Waveguide Multiplexers allow the user to configure connections between a number of RF inputs and outputs through a single device. Depending on the mode selected, single ports at both input and output ends are connected, or a single port at either end is connected to multiple ports at the other end. Therefore, these devices can be considered to operate as either a multiplexer or de-multiplexer, but for the sake of simplicity, are known by the former term.

MAG's Ferrite Waveguide Multiplexers operate in three modes as described in the figures on the following page. Other modes are available, dependent on input amplitude and phase characteristics.



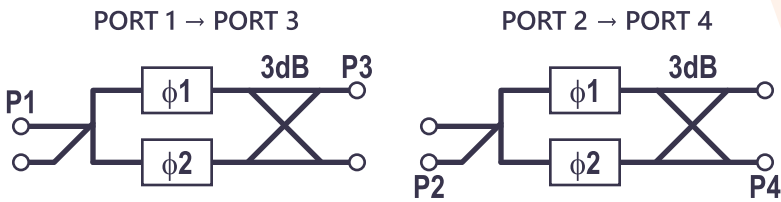
Measured values taken at lab ambient



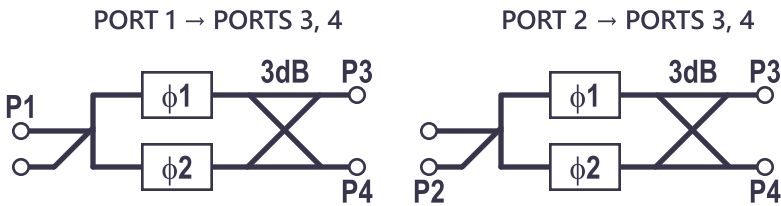
Generated data displayed here is taken from units of the configuration shown in the outline drawing on the next page. Please note that the extra waveguide length was provided per customer request. Also, the Mode 2 loss data includes 3 dB loss due to sidewall coupler characteristics.

Ferrite Waveguide Multiplexer

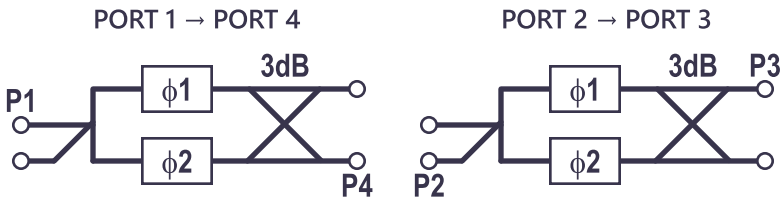
MODE 1



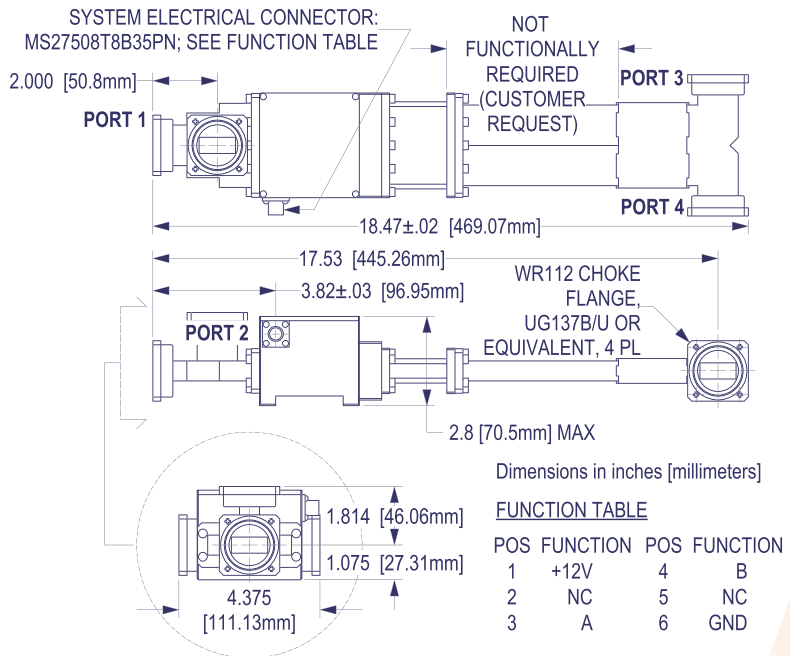
MODE 2



MODE 3



Outline Drawing



Sample of programs supported by MAG as OEM:

- APQ-164 B-1B ORS
- APQ-181 B-2
- APS-143 CP-140 Imaging
- APY-1/2 E-3 AWACS
- AR320 3D Air Defense
- ARTS-V1 / CLPS
- ARTS-V2
- ASARS-2 Synthetic Aperture
- ARSR-4 FAA Long Range
- ASTOR
- DWSR-2501C Doppler Weather
- Global Hawk Synthetic Aperture
- I-15/23 Reflectarray
- I-30 Simulator
- MPN-14K Landing Control
- PAAS Test Range
- Princeton Plasma Physics Laboratory
- RAC 3D Air Defense
- Skyshield 35 Air Defense
- Smart-L 3D Air Defense
- SPN-35C Approach Control
- SPQ-9B Surveillance / Tracking
- TPAAS Test Range
- TRS-3D Multimode
- TRS22XX 3D Air Defense
- ZPQ-1 Predator TESAR

MAG DMSMS program support:

- MPQ-64 Sentinel SHORAD
- APY-1/2 E-3 AWACS
- BMEWS / PAVE PAWS
- HAWK
- SPN-35C Approach Control
- MSQ-T43 MTE System

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