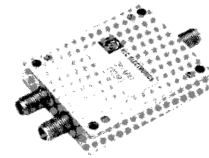


Multiplexers



RLC Electronics' Multiplexers are available in two, three or four channel versions. Adjacent passbands may be designed for a contiguous response, impedance matched through the crossover region with theoretical 3 dB power split at the crossover frequency. Alternatively, non-contiguous passbands may be selected with an out-of-band region between adjacent passbands. Multiplexers with individual channel bandwidths less than an octave are implemented with band pass filters multiplexed to a common input junction. Multiplexers with individual channel bandwidths greater than an octave are

normally implemented with a cascade of lowpass/high pass diplexers. For passband frequencies below 2 GHz, lumped element designs will often achieve the desired response in the smallest package. At higher frequencies, distributed coaxial structures are employed to achieve the lowest possible loss. RLC Electronics can supply Multiplexers for most applications, including commercial, telecommunications, and military specifications. Contact the factory with your specifications.

Specifications

Model Number-*

Multiplexer Type	Model Number	Frequency Range (MHz)	3 dB Bandwidth	Number of sections
Diplexer	DP-	10 to 18,000	Up to 70% of Center frequency for bandpass	2 Through 14
Triplexer	TP-		Up to 8 times crossover for Low pass High pass	
Quadraplexer	QP-			

*Part numbers will be assigned at factory

Typical Ratings:

VSWR: Non-Contiguous 1.6:1 max. Contiguous 2.0:1 max.

Passband Insertion Loss: 1dB

Crossover Loss(contiguous): 5dB max.

Power: 15 watts

RF Connectors: Type N, TNC, BNC, SMA (female)

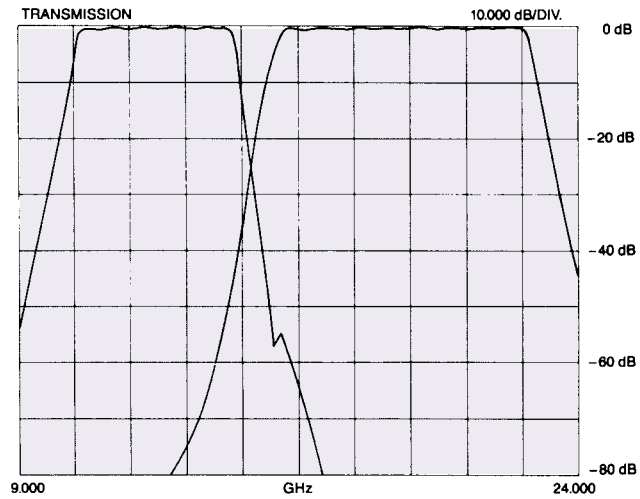
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e-mail: sales@rlcelectronics.com • www.rlcelectronics.com

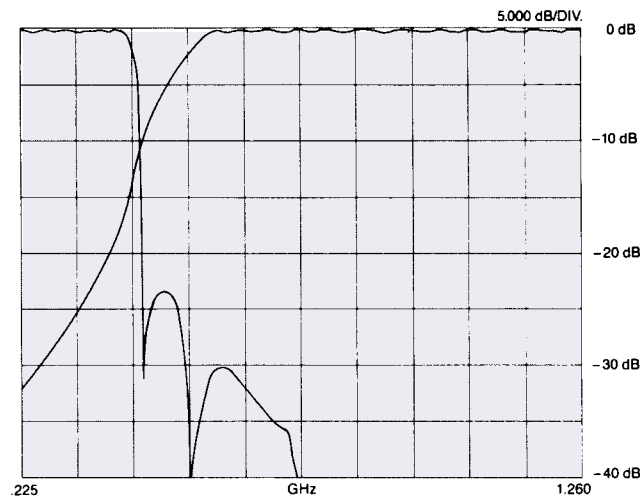


Sample Curves

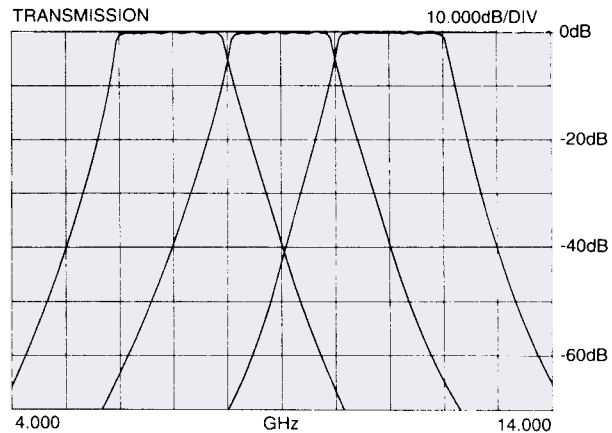
Diplexer
Bandpass, Distributed
Non-contiguous
Insertion Loss
 <1.0 dB within Passbands
VSWR
 < 2:1 within Passbands
 9 sections each side
 Size: 3 1/4 x 5/8 x 1/2



Diplexer
Highpass/Lowpass Lumped
Non-Contiguous
Insertion Loss
 ≤ 0.7 dB within Passbands
VSWR
 ≤1.3:1 within Passbands
 4 section Lowpass
 2 section Highpass
 Size: 4 x 5/8 x 1/2



Triplexer
Bandpass, Distributed
Contiguous
Insertion Loss
 < 1.0 dB within Passbands
VSWR
 < 2:1 within Passbands
 8 sections each side
 Size: 3 x 1 1/2 x 1/2



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