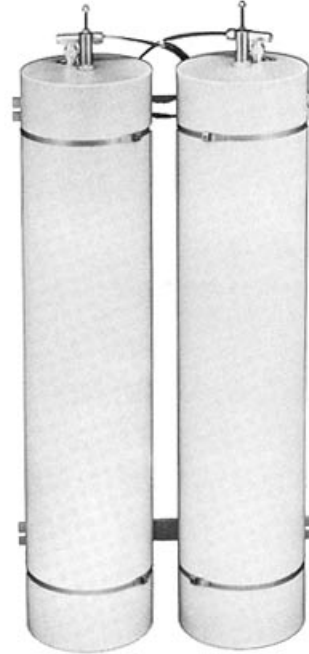


TPRC-1005-1, 2

BANDPASS/REJECT CAVITIES

**TPRC-1005-1****TPRC-1005-2**

Telewave 5" Pass-Reject Cavities TPRC-1005-1 and TPRC-1005-2 are available in various configurations to meet your exacting filtering needs. When closer spacing is required, 8" or 10" cavities are available for higher "Q". Pass-Reject cavities are designed to reject a narrow band of frequencies, and are often used in conjunction with pass or notch cavities in complex filtering designs.

TUNING RANGE

Telewave Notch Cavities TPRC-1005-1 and TPRC-1005-2 are shipped tuned and tested at 88-108 MHz from the factory. They can also be tuned to a single frequency specified by the customer. If field tuning is required, the positive locking mechanism makes tuning to another frequency simple. Cavities are tuned standard at 50 ohms impedance. However, upon request they can be tuned at 75 ohms.

FREQUENCY STABILITY

Frequency stability, which is critical in cavities of high "Q" design, is engineered to close tolerances by the use of a specially machined compensator and a threaded invar rod. The pass frequency is temperature stable from -30 C to +60 C. Some configurations allow use of up to 350 Watts.

RUGGED CONSTRUCTION

Heavy duty materials are used throughout the cavity to insure top performance and long life. The top plate is machined from 1/4" aluminum, and heliarc welded to the aluminum outer conductor. An acrylic enamel finish is applied to prevent corrosion. The use of similar metals and alodined aluminium prevents galvanic corrosion. Silver plated tuners and beryllium copper finger stock assure a long life and Higher "Q." Mounting rails are provided for all multiple-cavity filters.

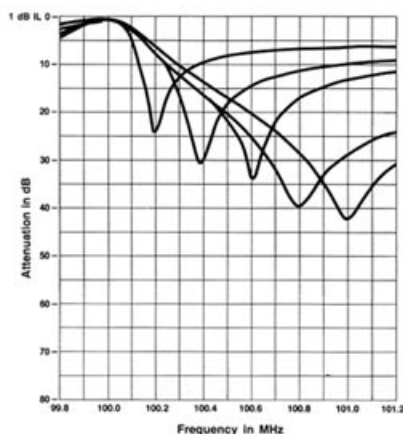
ADJUSTABLE SELECTIVITY

The TPRC-1005-1 & TPRC-1005-2 are quarter-wavelength cavities with an adjustable coupling loop and tuning capacitor. Insertion loss can be easily set from less than 0.5 dB to 2 dB or more with corresponding increases in selectivity. This allows for optimum settings of insertion loss and close frequency rejection. For severe RF environments, the TWNC-1005-2 dual cavity filter further increases "Q" to provide greater selectivity.

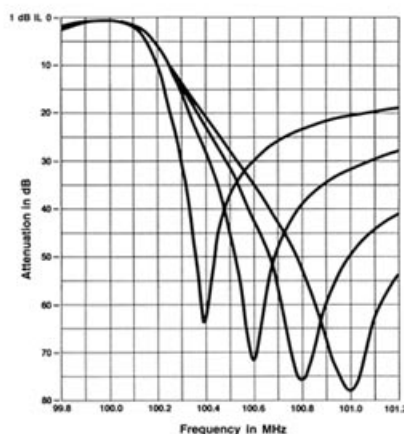
TELEWAVE, INC. 660 Giguere Court San Jose, CA 95133
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<http://www.telewave.com> Email: sales@telewave.com

TPRC-1005-1, 2

TYPICAL SELECTIVITY CHARACTERISTICS



TPRC-1005-1



TPRC-1005-2

ELECTRICAL DATA

Model	TPRC-1005-1	TPRC-1005-2
Frequency Range	88-108 MHz	88-108 MHz
Impedance	50 ohms (75 opt.)	50 ohms (75 opt.)
VSWR (Max)	1.5:1	1.5:1
Temperature Range	-30 C to +60 C	-30 C to +60 C
Maximum Power Input (Continuous)		
0.5 dB per Cavity	350 Watts	350 Watts
1.0 dB per Cavity	250 Watts	250 Watts
2.0 dB per Cavity	150 Watts	150 Watts

MECHANICAL DATA

Materials	TPRC-1005-1	TPRC-1005-2
Outer Conductor	6061-T6 Aluminum	6061-T6 Aluminum
Inner Conductor	Silver Plated Copper	Silver Plated Copper
Tuning Rods	Threaded Invar	Threaded Invar
End Plates	6061-T6 Aluminum	6061-T6 Aluminum
Coupling Loops	Silver Plated Copper	Silver Plated Copper
Dimensions in (cm)		
(individual cavity)	5 x 36 (13 x 91)	5 x 36 (13 x 91)
Maximum, outside in (cm)	5 x 46 (13 x 117)	5 x 19 x 46 (13 x 48 x 117)
(with tuning rod extended)		
Connector Termination:	N or UHF Female	N or UHF Female
Finish	Acrylic Enamel	Acrylic Enamel
Net Weight lb (kg)	8 (3.6)	19 (8.6)
Shipping Weight lb (kg)	11 (5)	25 (11.4)

Pass cavities are also available in 8" and 10" Dia.

Customized response curves are available to meet your exacting system requirements.

Contact Telewave for recommendations on your specific design.

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