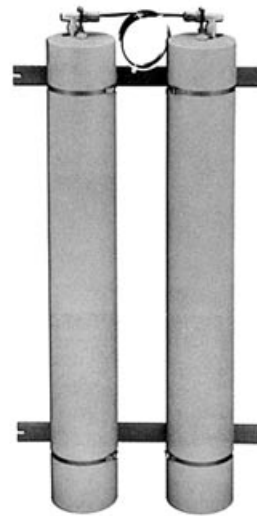


TWNC-1005-1, 2
NOTCH CAVITIES**TWNC-1005-1****TWNC-1005-2**

Telewave 5" Notch Cavities TWNC-1005-1 and TWNC-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 a higher "Q". Notch cavities are often used in conjunction with pass cavities in complex filtering designs.

TUNING RANGE

Telewave Notch Cavities TWNC-1005-1 and TWNC-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.

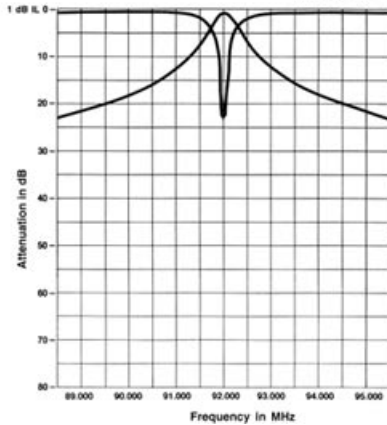
ADJUSTABLE SELECTIVITY

The TWNC-1005-1 & TWNC-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 uses ground loop technology which places the center pin of the loop at DC ground potential.

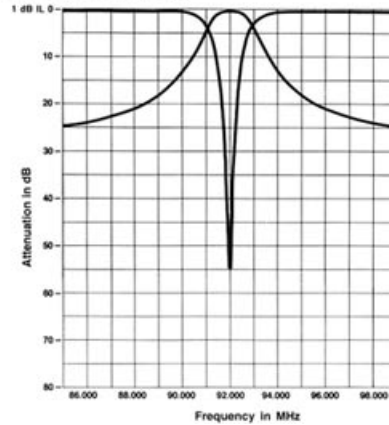
TELEWAVE, INC. 660 Giguere Court San Jose, CA 95133
Toll Free: 1-800-331-3396 Direct: 408-929-4400 Fax: 408-929-4080
<http://www.telewave.com> Email: sales@telewave.com

TWNC-1005-1, 2

TYPICAL SELECTIVITY CHARACTERISTICS



TWNC-1005-1



TWNC-1005-2

ELECTRICAL DATA

Model	<u>TWNC-1005-1</u>	<u>TWNC-1005-2</u>
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		
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)	5 x 36 (13 x 91)	5 x 36 (13 x 91)
(individual cavity)		
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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