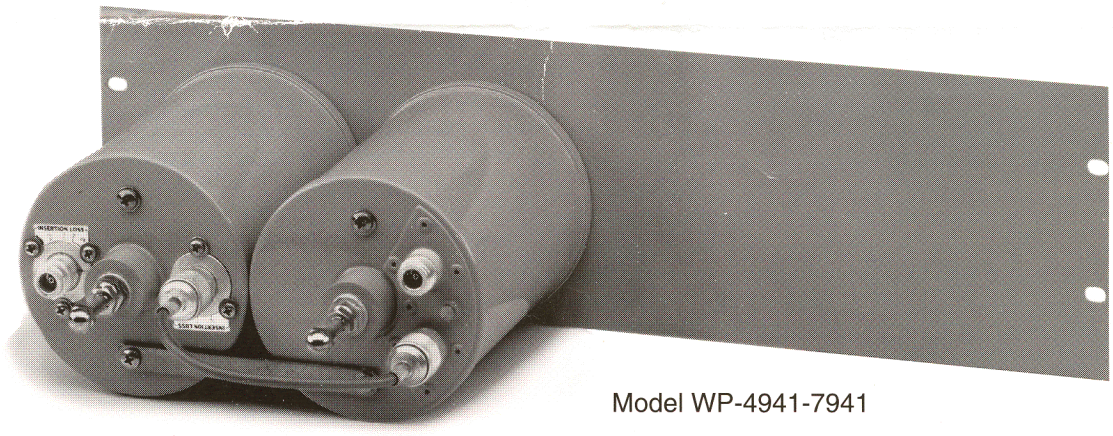
RECEIVER PRESELECTOR FILTERS

WP-4941-7941
WP-4941-7941-2
WP-794-2

800-960 MHz



Model WP-4941-7941

Model WP-4941-7941 is a dual cavity combination for use with transmitters (150 watt max) or receivers operating in the 800-960 MHz band. It consists of two 4" OD copper cavities, one bandpass and one bandpass-reject, mounted on a 5 1/4" x 19" panel for standard 19" rack mounting. This combination of cavity filters provides unique selectivity characteristics. The bandpass cavity provides the typical broad band protection from interference sources up and down the spectrum. The BpBr Filter offers acceptable bandpass characteristics near the pass frequency but, more importantly, provides the means to selectively notch (attenuate) a narrow band of undesired frequencies by 40 dB or more, depending on proximity to the pass frequency.

Model WP-4941-7941-2 is a dual version of the above model and designed for use with a two receiver diversity system. This model includes two model WP-4941-7941 dual cavity filters mounted on the same 5 1/4" x 19" panel. Each of the dual filters is identical to model WP-4941-7941 and each has its own input and output.

Model WP-794-2 is a dual bandpass-reject filter for use with transmitters (150 watt max) or receivers operating in the 800-960 MHz band. It consists of two 4" OD copper BpBr Filters mounted on a 5 1/4" x 19" panel for standard rack mounting. The notches can be adjusted to attenuate the same frequency(ies) or to two different frequencies.

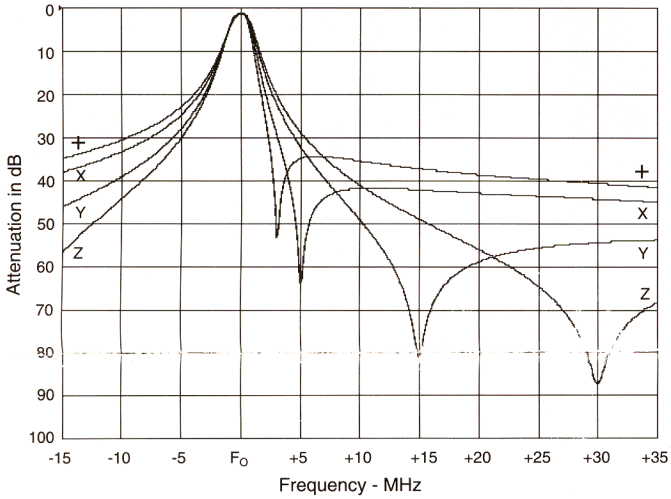
WHEN ORDERING, specify the model number and the exact pass and reject-frequency(ies). For the dual model, specify the exact frequency(ies) to be passed and frequency(ies) to be rejected by each of the two dual filters. Presumably, the pass and reject frequencies for both dual filters will be the same but this fact must be verified.

Rx EQUIPMENT

WACOM
PRODUCTS, INC.

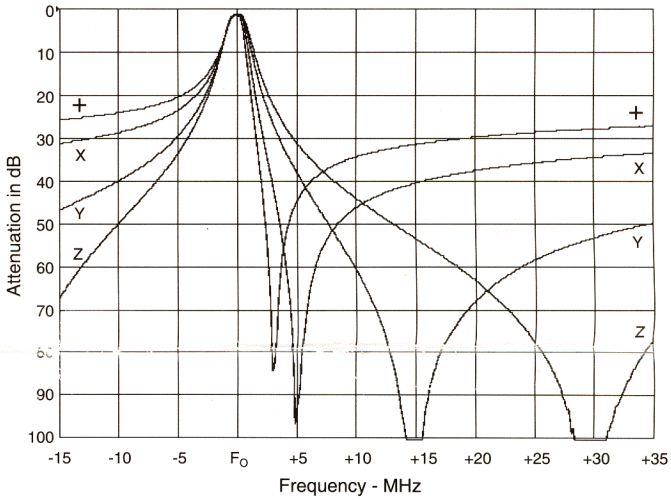
Printed in U.S.A.– 6-97

FIG. 1 Model WP-4941-7941 @ 901 MHz



+ = 3 MHz
X = 5 MHz
Y = 15 MHz
Z = 30 MHz

FIG. 2 Model WP-794-2 @ 901 MHz



+ = 3 MHz
X = 5 MHz
Y = 15 MHz
Z = 30 MHz

ELECTRICAL DATA

	WP-4941-7941	WP-4941-7941-2	WP-794-2
Tuning Range (pass frequency)	Any 25 MHz band within the 800-960 MHz Range	Any 25 MHz band within the 800-960 MHz Range	Any 25 MHz band within the 800-960 MHz Range
Tuning Range (Reject Frequency)	±3 to 40 MHz of Fo	±3 to 40 MHz of Fo	±3 to 40 MHz of Fo
Insertion Loss	Adjustable— 1.0 to 2.0 dB	Adjustable- 1.0 to 2.0 dB	1.1 dB
Attenuation	See Fig. 1	See Fig. 1	See Fig. 2
Nominal Impedance	50 ohms	50 ohms	50 ohms
VSWR at Resonance (maximum)	1.5 to 1	1.5 to 1	1.5 to 1
Maximum Power Input (with insertion loss per cavity set at 0.5 dB)	175 watts	175 watts	150 watts
Operating Temperature Range	-30° to +60°C	-30° to +60°C	-30° to +60°C
Cavity Electrical Length	1/4 wavelength	1/4 wavelength	1/4 wavelength

MECHANICAL DATA

Materials			
Outer Conductor, Center Conductor, & End Plates	Copper	Copper	Copper
Tuning Rod	Invar	Invar	Invar
Dimensions			
Individual Cavity	4" dia. x 6"	4" dia. x 6"	4" dia. x 6"
Maximum, outside, H x W x D (with tuning rod extended)	5 1/4"x 19"x 10"	5 1/4"x 19"x 10"	5 1/4"x 19"x 10"
Connector Terminations	Type N Female	Type N Female	Type N Female
Shipping Weight	15 lbs.	20 lbs.	15 lbs.