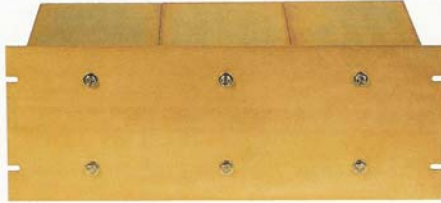




900 MHz Paging Filters



General Description:

These high power 900 MHz Paging Filters are ideal for reducing transmitter noise. They exhibit exceptional heat dissipation and selectivity characteristics. Each filter consists of three iris coupled 5.83" square $\frac{3}{4}$ wavelength bandpass cavity resonators.

Construction:

The same rugged, high quality, welded construction that TX RX Systems' coaxial cavity filters are known for, has been applied to the design of these filters, with some notable improvements. Each square cavity filter is constructed of a special heavy-gauge aluminum extrusion. This extrusion was designed by TX RX Systems specifically for coaxial cavity filter applications. A unique ribbed inner-wall design provides rigidity, 50% more mass, and 15% greater surface area than standard cavity filters. These features contribute to better overall heat transfer characteristics which result in stable operation when subjected to high RF power transmissions.

Versions:

Models with 3 MHz, 1 MHz, and 700 KHz pass bandwidths are currently available. Each model is tuned for best response over the designed bandwidth and maximum selectivity at out-of-band frequencies. Refer to the selectivity curves on reverse side for the specific responses of the various models. Consult the factory for information on custom application of this product.

Mechanical:

Two mounting options are available. The standard option includes side mounted brackets positioned 7.75" from rear of cavity. A second option uses a sturdy .125" thick rack panel secured to the base of cavities (shown above). Both options meet EIA 19" rack standards for hole spacings and panel width.

Connectors:

All models come standard with 7/16 DIN connectors. Optional type "N" connectors are available for applications that do not exceed 500 Watts maximum power.

Technical Specifications

Applicable to all models	
Frequency Range	928-960 MHz
Bandwidth	3 MHz (Model:11-90-96222) 1 MHz (Model: 11-90-96229) 700 KHz (Model: 11-90-96242)
Max Cont. Power	1000 Watts (Model : 11-90-96222) 1000 Watts (Model : 11-90-96229) 600 Watts (Model : 11-90-96242)
Typical Tx Noise Suppression	refer to applicable curves on reverse side
Nominal Impedance	50 Ohms
Max. Input Return Loss (VSWR)	-20 dB (1.22:1)
Temperature Range	-30° to +60° C

Mechanical Specifications

Applicable to all models	
Mounting Options	"-P" Trailer: Panel mount version 7"H x 19"W x 16"D No Trailer: Includes side mount brackets positioned 7.75" from base of filter assembly. Approximately 8.25" clearance in front of rack face is required. 19"W x 16"D
Weight, lb. (Kg)	28 (12.7)
Connector Options	"-N" Trailer: Uses N-type female connectors on both input and output No Trailer: 7/16 DIN female on both input and output (standard)

Model number examples:

- 11-90-96222-P-N Panel mount with N-type connectors
- 11-90-96229-N Standard side mount brackets with N-type connectors

Filters: High Power 900 MHz Paging

