COAXIAL
HARMONIC ABSORPTIVE FILTERS
C70-A SERIES

DATA SHEET No. T82A

- **LOW REFLECTION STOP BAND**
- **ULTRA SHARP CUTOFF**
- **UP TO 90 dB ATTENUATION**

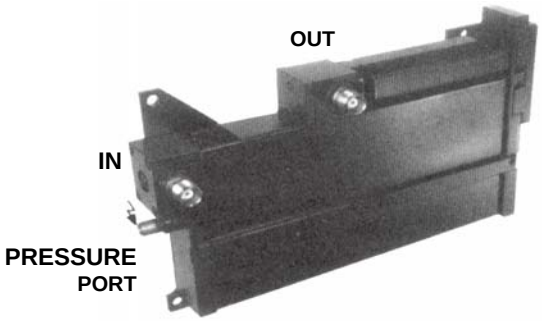
DESCRIPTION

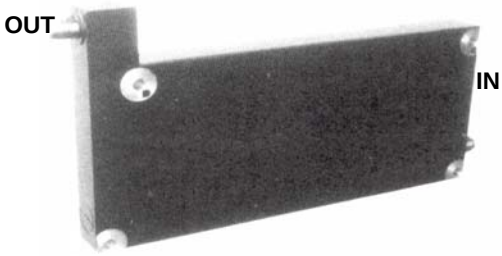
MEC's C70-A Series of coaxial harmonic absorption filters have a low pass characteristic distinguished by an ultra sharp cutoff skirt going from under 1dB passband loss to as high as 90dB attenuation in a transition band no wider than 10% of F_c. Their pass-band extends from DC to the specified F_c in the 2-18 GHz range and the stop band from F_c +. 1 F_c to over 3 F_c.

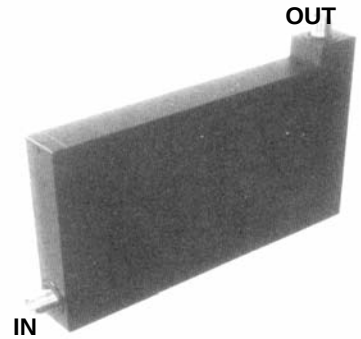
Unlike the more common C70-L series, these C70-A filters do not reflect harmonic energy back to the transmitter but absorb it internally while maintaining low input VSWR over transition and stop bands. This feature makes them indispensable in today's ECM systems to condition signals and protect TWT's from harmonics and other harmful reflections which would otherwise cause overheating, premature burnout, higher EMI, and greater detection vulnerability

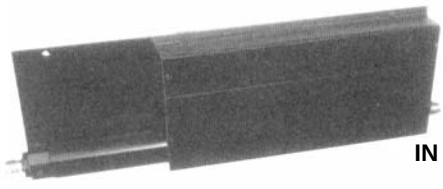
Other notable features include low passband loss from .3 to 1 dB; VSWR under 1.5:1; compact size typically 5" x 7" x 1" and weight under 2 pounds for a cutoff in X-band. Power handling over pass and stop bands is in the hundreds of watts CW, and several kilowatts peak, under non-conditioned temperature/altitude and vibration environments of MIL-E-5400. Exact figures depend on the frequencies, attenuation and connectors required.

The body is made of aluminum plates with rugged dip-brazed construction. Internal absorbers, connectors and all other materials are especially selected to withstand prolonged high temperature operation without external cooling or thermal mounting. Finish is chromate conversion per MIL-C-5541, Class 3, with high emissivity black epoxy enamel paint.

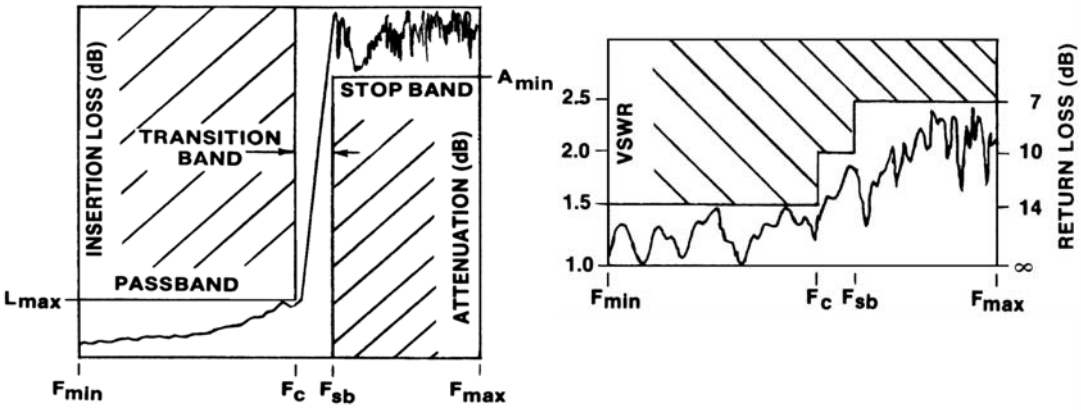








SPECIFICATIONS & TYPICAL DATA



ORDERING INFORMATION

(1) Specify F_{min}, F_c, F_{sb}, F_{max}, L_{max} (insertion loss). A_{min} (attenuation), Power (CW & Peak) and connectors (TNC, N, SC, MLT, LC,EIA series).

(2) Size and configuration determined by above specifications and may be tailored to suit customer preferences.

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