

“FR” Series Notch Filters

General Information

Refer to CI-1055 for tools required and recommended test equipment and setup.

Refer to CI-1053 for electrical specifications, typical response curves, and the various input and output configurations which are required to obtain the passbands optimized above, below or equally with reference to the notch frequency. The various response paths are determined at the factory by the input and output configurations at the time of order and should not be changed.

A notch or rejection null is created at the unwanted frequency by adjusting the cavity tuning rod.

The insertion loss at the frequency to be passed is optimized by the type of response path used.

The amount of notch attenuation is dependent upon the size and position of the coupling loop, which is a factory adjustment. If a change in the field is required, loosen the 3 set screws holding the loop and rotate the loop to the desired notch depth. Then lock the loop back into place with the 3 set screws.

Tuning Procedure

Each cavity has a coarse tuning adjustment for large changes in frequency and a fine tuning adjustment for small changes in frequency. Coarse tuning is accomplished by unlocking the coarse tuning lock screw and sliding the tuning rod in or out. Fine tuning adjustments are made by locking the coarse tuning lock screw securely and loosening the fine tuning lock screw, then rotating the fine tuning bolt.

After final tuning, both the fine and coarse tuning lock screws must be tightened down securely.

Note: Pushing the tuning rod or turning the fine tuning bolt in, lowers the resonance of the filter.

