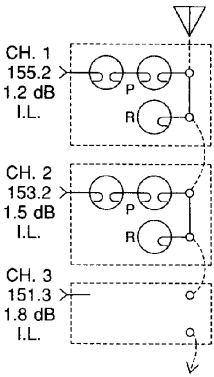
"C" Series
Multicouplers

Typical Systems

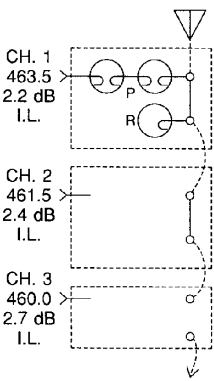
- Shown below are typical "C"-Series modules using 2 or more band pass filters and a reject cavity (notch filter) which acts to connect only the channel frequency to the antenna line, passing all other frequencies along the antenna line to subsequent channels.
- The band pass filters pass only their channel, rejecting all others, which means that additional channels may be added without modifying existing channels as long as the minimum frequency separation as set by the system isolation requirements and filter performance is not exceeded.
- The band pass filters isolate the system from others in the multicoupler. The reject filter is used for matching the input port to the antenna output (low insertion loss from input to antenna and visa versa).



MINIMUM ISOLATION
CHAN. TO CHAN. = 70 dB,
± 1.5 MHz OR MORE

MODEL C-2027

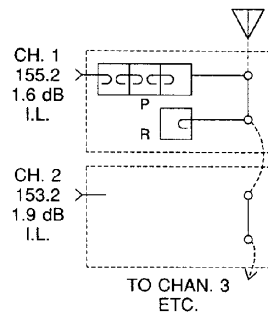
CAVITIES ARE:
7" DIA. x 30" LONG



MINIMUM ISOLATION
CHAN. TO CHAN. = 52 dB,
± 2 MHz OR MORE

MODEL C-3027

CAVITIES ARE:
7" DIA. x 10" LONG



MINIMUM ISOLATION
CHAN. TO CHAN. = 62 dB,
± 2 MHz OR MORE

MODEL C-2024

CAVITIES ARE:
4" SQ. x 10" LONG
RES-LOK 4 CAVITY
INLINE.

NOTES:

1. Each band pass cavity is tuned from 0.5 to 1.5 insertion loss and the reject cavity is tuned to a reject notch of 20-25 dB at the pass frequency, depending upon isolation required.
2. Dotted enclosures represent standard channel packages on 19" rack or panel mounting.
3. All cables in each series are critical lengths and should not be altered.

   The interconnect cables between series are non critical lengths and consist of RG-213/u or RG-214/u cables.
4. The last channel added to the system should be terminated with a 50 ohm, 30 to 60 watt load.
5. Refer to page CI-1117 for other electrical specifications and for other insertion loss and isolation values.