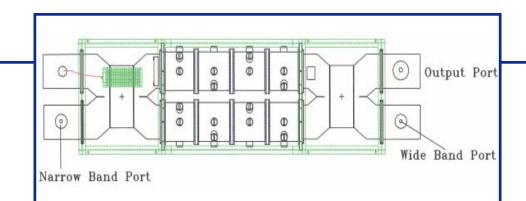


## UHF-TV DUAL CHANNEL COMBINER

- All Waveguide
- Small Volume
- High Power
- High Isolation
- Low Insertion Loss

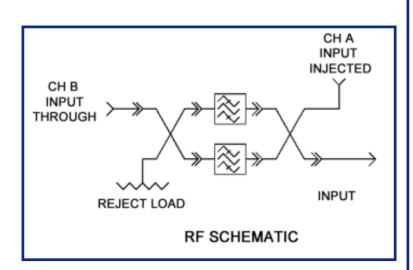


The MCI dual channel UHF-TV combiner is a constant impedance device consisting of two waveguide bandpass filters and two hybrids. The combiner allows two high power UHF-TV transmitters, operating on different channels, to use a common feedline and antenna system without causing interference to each other. It offers low insertion loss and VSWR on both channels.

A typical design provides 35dB minimum isolation with a 6 section bandpass filter for a single channel separation. Reducing the number of filter sections for large spaced channels would result in somewhat decreased through channel insertion loss.

The maximum channel separation is determined by the waveguide size and for optimum performance should not exceed a 30% frequency bandwidth.

Final specifications are dependent on the frequencies to be combined.





**SPECIFICATIONS** 

Frequency: Specify Channel (14-70)

VSWR: 1.10 Both Channels

Insertion Loss: 0.25 dB Through Channels

0.1 dB Injected Channels

Isolation: 35 dB Both Channels

Power: 140kW Model # 41229, 41228, 41227

280kW Model # 41219, 41218, 41217

Specifications shown reflect a four-channel spacing. Results vary with different channel spacing.

		UHF		
FREQUENCY (MHz)		470-608	566-728	698-860
CHANNEL RANGE		14.36	30.56	52.69
MODEL	280kW	41219	41218	41217
MODEL	140kW	41229	41228	41227
WAVEGUIDE SIZE SIZE ft		WR1800 18x5x3	WR1500 15x4x2	WR1150 13x3x2
WEIGHT	(m) Ibs	(5.48x1.52x0.91) 650	(4.57x1.21x0.60) 400	(3.96x0.91x0.60) 300
(kg) INPUT FLANGE 280 kW INPUT FLANGE 140 kW OUTPUT FLANGE		(295) WR1800 COAX WR1800	(181) WR1500 COAX WR1500	(136) WR1150 COAX WR1150

All specifications are subject to change without notice.

