



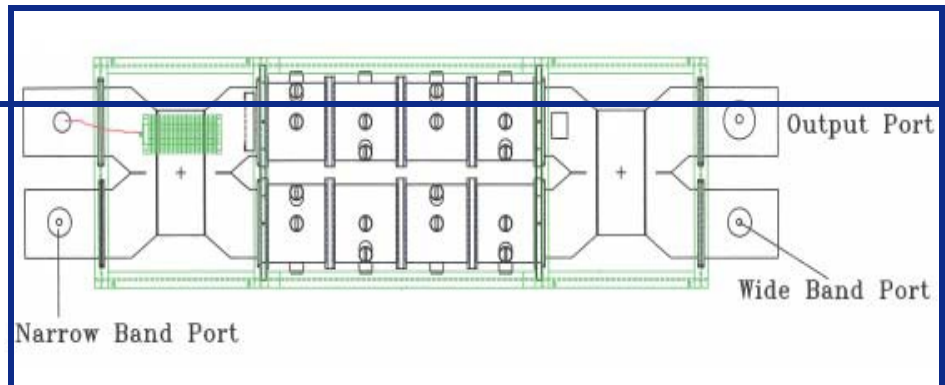
Micro Communications, Inc.

Microwave A MICROWAVE TECHNIQUES COMPANY

SERIES 41000

# UHF-TV DUAL CHANNEL COMBINER

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

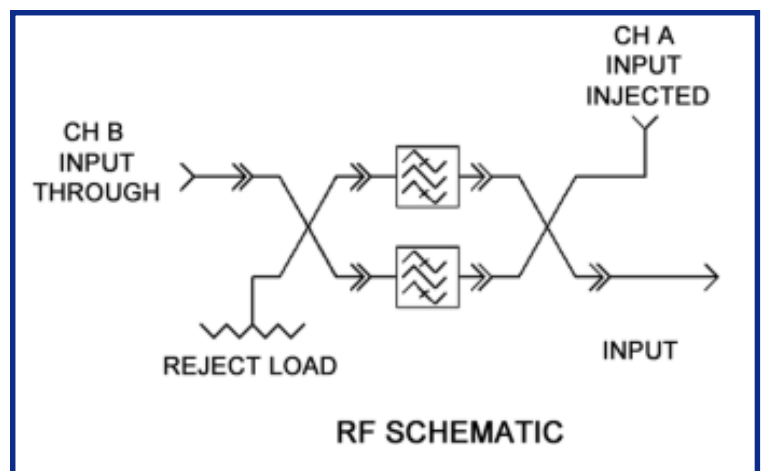


The MCI dual channel UHF-TV combiner is a constant impedance device consisting of two waveguide bandpass filters and two hybrids. The combiner allows two high power UHF-TV transmitters, operating on different channels, to use a common feedline and antenna system without causing interference to each other.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





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

All specifications are subject to change without notice.



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