



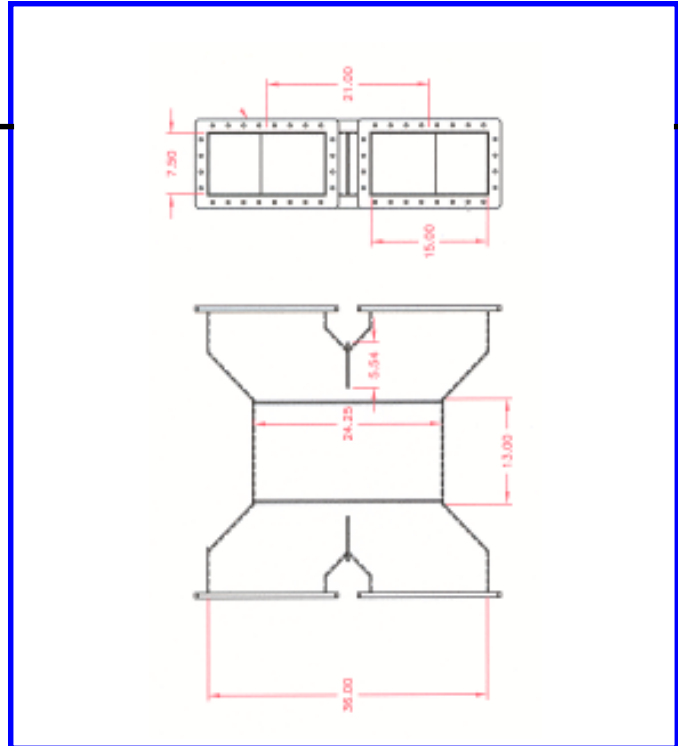
HIGH POWER UHF-TV COMBINERS

- Low Loss
- Low VSWR
- High Transmitter Isolation
- All Waveguide Construction

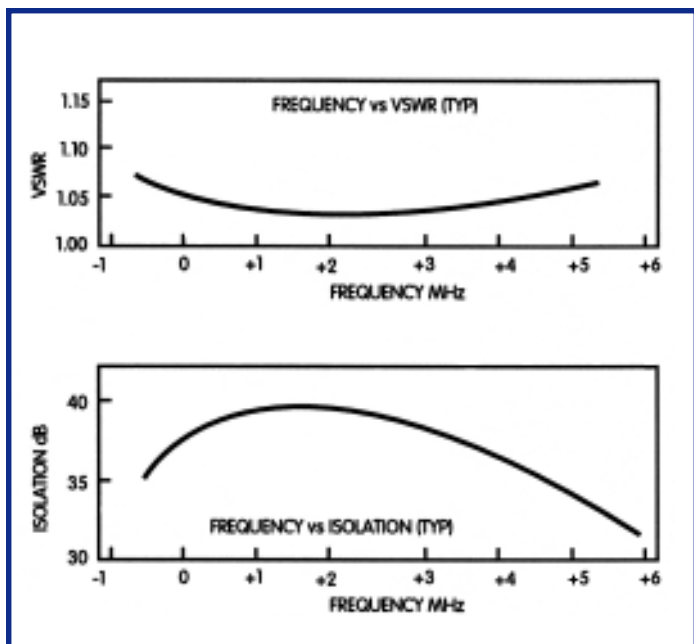
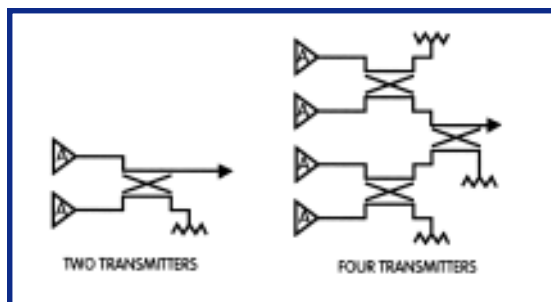
MCI Waveguide Combiners are used to combine any number of transmitters to a single output.

The combining action is accomplished by feeding two signals of equal amplitude in phased quadrature into a high power MCI broadband hybrid. Two transmitters require one hybrid combiner; four transmitters require three hybrid combiners (see schematic below). Unequal combiners are also available when it is necessary to combine an odd number of transmitters into a single output.

The reject load at each level of combining must be capable of handling half the



power of the remaining transmitter in case of failure. Directional couplers and wattmeters can be provided in front of each reject load to facilitate adjustment of phase.





SPECIFICATIONS	
Frequency:	Specify Channel (14-69)
VSWR:	< 1.10 Over Passband
Insertion Loss:	< 0.1 dB
Isolation:	> 30 dB between any transmitter

	UHF		
FREQUENCY (MHz)	470-608	566-728	698-860
CHANNEL RANGE	14-36	30-56	52-69
MODEL	55029	55028	55027
SIZE	WR1800	WR1500	WR1150
COMBINED OUTPUT POWER (4 transmitters)	280kW	280kW	280kW
SIZE	ft 12x7x2 (m) (3.65x2.13x0.60)	ft 10x6x2 (m) (3.04x1.82x0.60)	ft 9x5x1 (m) (2.74x1.52x0.30)
WEIGHT	lbs 750 (kg) (340)	lbs 700 (kg) (317)	lbs 600 (kg) (272)
INPUT FLANGE	6 1/8 EIA	6 1/8 EIA	6 1/8 EIA
OUTPUT FLANGE	WR1800	WR1500	WR1150
MODEL	55019	55018	55017
SIZE	WR1800	WR1500	WR1150
COMBINED OUTPUT POWER (4 transmitters)	140kW	140kW	140kW
SIZE	ft 6x3x2 (m) (1.82x0.91x0.60)	ft 6x3x2 (m) (1.82x0.91x0.60)	ft 5x3x1 (m) (1.52x0.91x0.30)
WEIGHT	lbs 250 (kg) (113)	lbs 200 (kg) (90)	lbs 185 (kg) (84)
INPUT FLANGE	6 1/8 EIA	6 1/8 EIA	6 1/8 EIA
OUTPUT FLANGE	6 1/8 EIA	6 1/8 EIA	6 1/8 EIA
MODEL	55049	55048	55047
SIZE	WR1800	WR1500	WR1150
COMBINED OUTPUT POWER (4 transmitters)	70kW	70kW	70kW
SIZE	ft 7x3x2 (m) (2.13x0.91x0.60)	ft 6x3x2 (m) (1.82x0.91x0.60)	ft 5x3x1 (m) (1.52x0.91x0.30)
WEIGHT	lbs 250 (kg) (113)	lbs 200 (kg) (90)	lbs 185 (kg) (84)
INPUT FLANGE	6 1/8 EIA	6 1/8 EIA	6 1/8 EIA
OUTPUT FLANGE	6 1/8 EIA	6 1/8 EIA	6 1/8 EIA

All specifications are subject to change without notice.

