2-Channel Hybrid Ring Combiner for 85 MHz Transmitters

DESCRIPTION

- Combining two transmitters or receivers on the same antenna.
- Better utilization of good antenna position.
- Two antennas on the same transmitter or receiver.
- Combining two signal generators.
- The only combining option with very small Tx-Tx frequency spacing.
- 30 W load supplied. (Other loads or no loads as option).

SPECIFICATIONS

Electrical	
Model	PRO-PHY85-2-...
Filter Type	Hybrid Junction
Frequency	68 - 88 MHz (see ordering)
Max. Input Power	30 W per channel (max. 100 W with larger load)
Insertion Loss	< 3.4 dB @ 2 MHz BW < 3.7 dB @ 4 MHz BW
Impedance	50 Ω
Isolation Tx1 - Tx2	> 35 dB @ 2 MHz BW > 30 dB @ 4 MHz BW (* see note)
VSWR	< 1.5:1 with all other ports terminated with 50 Ω
Load	30 W load fitted (other ratings available) (** see note)
No. of channels	2

Mechanical	
Connection(s)	N-female (other on request)
Dimensions	210 x 85 (incl. conn.) x 42 mm (excl. load)
Weight	Approx. 0.7 kg / 1.54 lb. (excl. load)

Environmental	
Operating temperature range	-30 °C to +60 °C

ORDERING

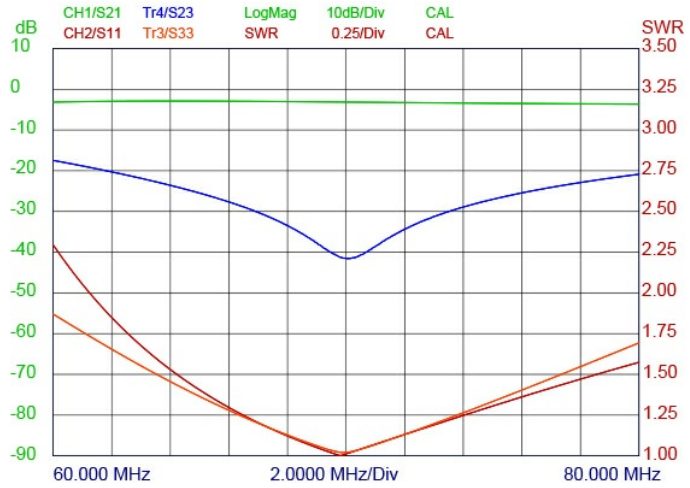
Model	Product No.	Frequency
PRO-PHY85-2-1	210000539	68 - 72 MHz
PRO-PHY85-2-2	210000653	71 - 75 MHz
PRO-PHY85-2-3	210000550	74 - 78 MHz
PRO-PHY85-2-4	210000589	77 - 81 MHz
PRO-PHY85-2-5	210000588	80 - 84 MHz
PRO-PHY85-2-6	210000541	83 - 87 MHz

NOTE

* The isolation between the Tx ports is directly dependent on the terminating VSWR on the antenna port. With an antenna load VSWR = 1.5, the isolation between the two Tx ports will be reduced to 20 dB @ 5 MHz bandwidth.

** The VSWR of the load's should be < 1.1! Each load should be able to dissipate 1/2 of the input power. E.g.: With 50 W input in total for the two channels, the load should be able to dissipate 50 W x 1/2 = 25 W.

TYPICAL RESPONSE CURVES



MOUNTING DETAILS