

5-Channel Hybrid Combiner for 450 MHz Transmitters

DESCRIPTION

- Combining five transmitters or receivers on the same antenna.
- Better utilisation of good antenna position.
- Five antennas on the same transmitter or receiver.
- The only combining option with very small Tx-Tx frequency spacing.
- 30 W loads included (other loads or no loads as option).

SPECIFICATIONS

Electrical	
Model	PRO-PHY450-5
Filter Type	Hybrid Junction
Frequency	380 - 480 MHz
Max. Input Power	37.5 W per channel (max. 125 W with larger load)
Insertion Loss	< 7.5 dB ±0.3 dB @ 11 MHz BW < 7.8 dB ±0.3 dB @ 22 MHz BW
Impedance	50 Ω
Isolation Tx1 - Tx2	> 30 dB @ 11 MHz BW > 28 dB @ 22 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	5

Mechanical	
Connection(s)	N(f) (other on request)
Dimensions	510 x 89 (incl. conn.) x 42 mm (excl. load) 20.08 x 3.50 (incl. conn.) x 1.7 in. (wxcl. load)
Weight	Approx. 1.625 kg / 3.58 lb.

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



ORDERING

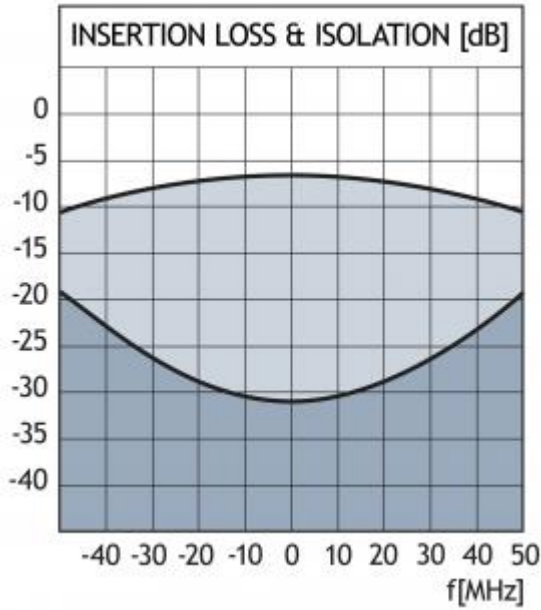
Model	Product No.	Frequency
PRO-PHY450-5-1	210001383	380 - 400 MHz
PRO-PHY450-5-2	210001384	390 - 410 MHz
PRO-PHY450-5-3	210001385	400 - 420 MHz
PRO-PHY450-5-4	210001386	410 - 430 MHz
PRO-PHY450-5-5	210001387	420 - 440 MHz
PRO-PHY450-5-6	210001388	430 - 450 MHz
PRO-PHY450-5-7	210001389	440 - 460 MHz
PRO-PHY450-5-8	210001390	450 - 470 MHz
PRO-PHY450-5-9	210001391	460 - 480 MHz

NOTE

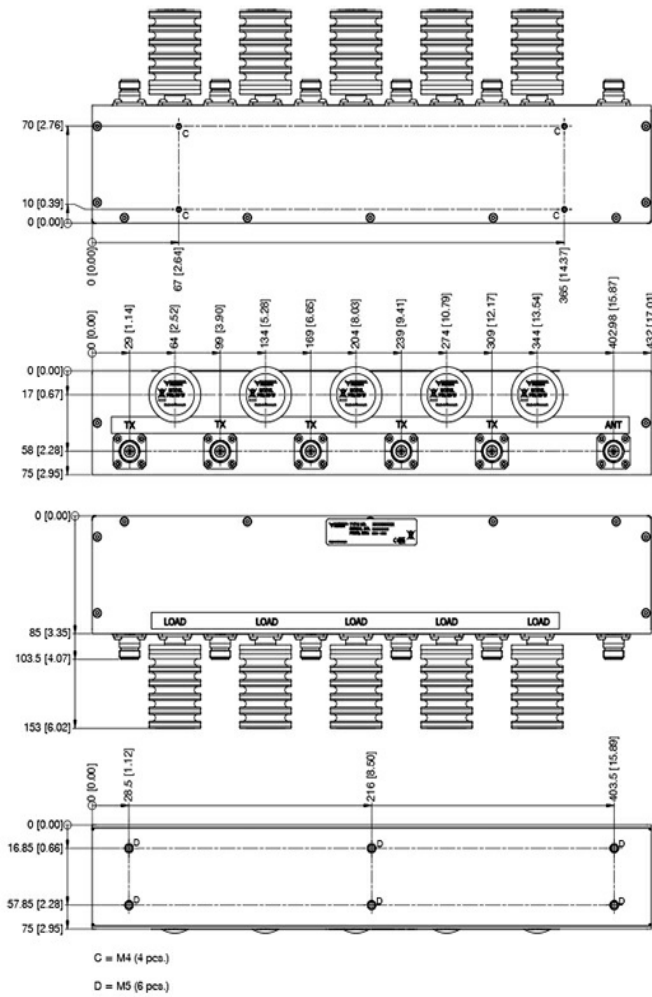
* The isolation between the Tx ports is directly dependent on the terminating VSWR on the antenna port. With an antenna load VSWR = 1.5, the isolation between the two Tx ports will be reduced to 20 dB @ 5 MHz bandwidth.

** The VSWR of the load's should be < 1.1! Each load should be able to dissipate 4/5 of the input power. E.g.: With 50 W input, each load should be able to dissipate 50 W x 4/5 = 40 W.

TYPICAL RESPONSE CURVES



MOUNTING DETAILS



All dimensions are given in mm [in.]

