3-Channel Hybrid Combiner for 150 MHz Transmitters

DESCRIPTION

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

SPECIFICATIONS

Electrical	
Model	PRO-PHY150-3
Filter Type	Hybrid Junction
Frequency	136 - 175 MHz (see ordering)
Max. Input Power	45 W per channel (max. 150 W with larger load)
Insertion Loss	< 5.2 dB ± 0.3 dB @ 8 MHz BW < 5.4 dB ± 0.3 dB @ 16 MHz BW
Impedance	50 Ω
Isolation Tx1 - Tx2	> 26 dB @ 8 MHz BW > 24 dB @ 16 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	3

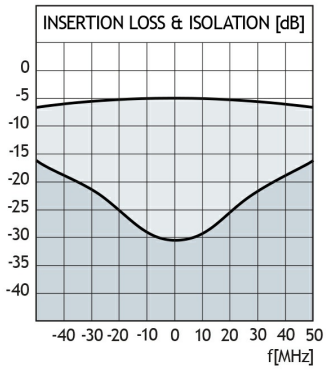
Mechanical	
Connection(s)	N(f) (other on request)
Dimensions	400 x 89 (incl. conn.) x 42 mm (excl. loads) / 15.75 x 3.50 x 1.65 in.
Weight	Approx. 1.3 kg / 2.87 lb. (excl. load)

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

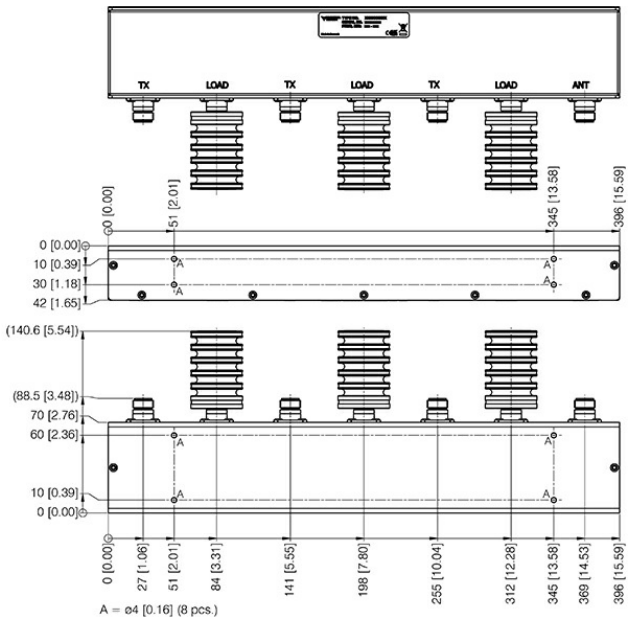
ORDERING

Model	Product No.	Frequency
PRO-PHY150-3-1	210001225	130 - 142 MHz
PRO-PHY150-3-2	210000639	138 - 150 MHz
PRO-PHY150-3-3	210000611	146 - 158 MHz
PRO-PHY150-3-4	210000547	154 - 166 MHz
PRO-PHY150-3-5	210000583	162 - 174 MHz
PRO-PHY150-3-6	210000793	170 - 182 MHz

TYPICAL RESPONSE CURVE



MOUNTING DETAILS



All dimensions are given in mm [in.]

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 2/3 of the input power. E.g.: With 50 W input, each load should be able to dissipate 50 W x 2/3 = 33 W.

PROCOM A/S reserves the right to
amend specifications without prior notice

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