

2-Channel Hybrid Ring Power Splitter/combiner for the 450 MHz band

DESCRIPTION

- Combines two transmitters or receivers on the same antenna.
- Better utilization of good antenna position.
- The only combining option with very small Tx-Tx frequency spacing.
- 30 W load built-in.
- Two antennas on the same transmitter or receiver.
- Symmetrical 1:1 dividing ratio (-3 dB).
- Can be delivered with asymmetrical dividing ratio, e.g. -6 dB, -10 dB or -15 dB.
- Centre frequency to be arbitrary specified by the customer within 380 - 475 MHz.



SPECIFICATIONS

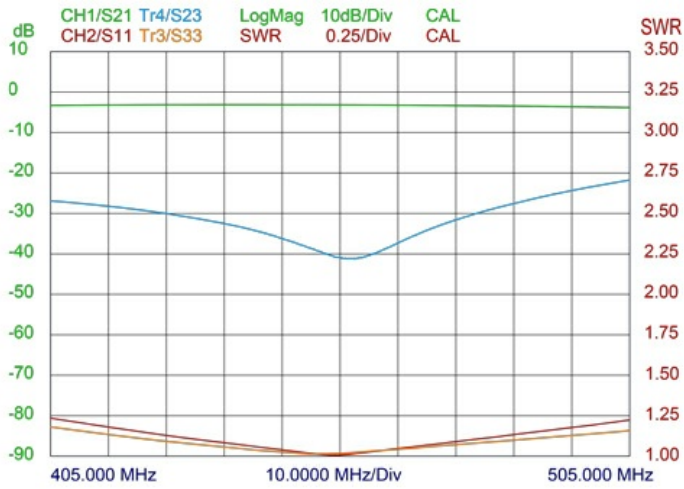
Electrical	
Model	PRO-MPHY450-2-.. dB-N-...
Filter Type	Hybrid Junction
Frequency	To be stated within 380 and 475 MHz
Max. Input Power	30 W per channel when used as a power combiner. 60 W when used as a power divider. Note : When used as a power combiner, extra cooling is necessary. At 2 x 30 W the unit requires a heatsink with $R_{th} = 3 \text{ }^{\circ}\text{C/W}$.
Insertion Loss	< 3.4 dB @ ± 5 MHz BW < 3.7 dB @ ± 10 MHz BW
Impedance	50 Ω
Isolation	> 35 dB @ ± 5 MHz BW > 30 dB @ ± 10 MHz BW
VSWR	< 1.5:1 within ± 10 MHz from centre frequency, all other ports terminated with 50 Ω .
No. of channels	2
Mechanical	
Connection(s)	N(f) (other on request)
Dimensions	129 (incl. conn.) x 152 (incl. flanges) x 35 mm / 5.08 x 5.98 x 1.38 in.
Weight	Approx. 0.35 kg / 0.77 lb.
Environmental	
Operating temperature range	-30 $^{\circ}\text{C}$ to +60 $^{\circ}\text{C}$

ORDERING

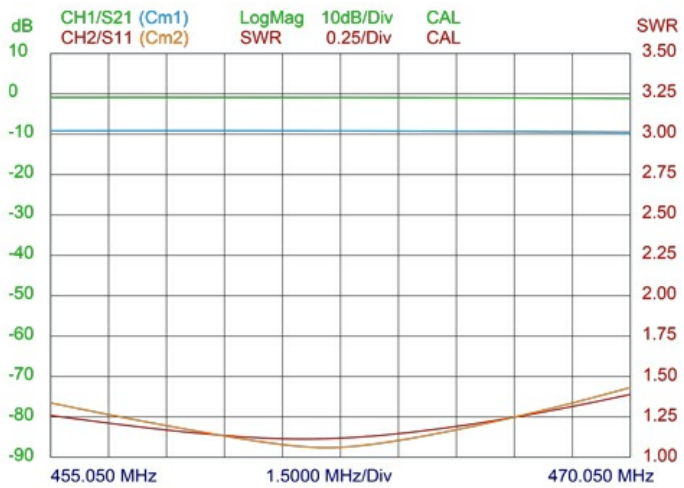
Model	Product No.
PRO-MPHY450-2-3 dB-N	210000606
PRO-MPHY450-2-6 dB-N	210000728
PRO-MPHY450-2-10 dB-N	210000746
PRO-MPHY450-2-15 dB-N	210001145

TYPICAL RESPONSE CURVES

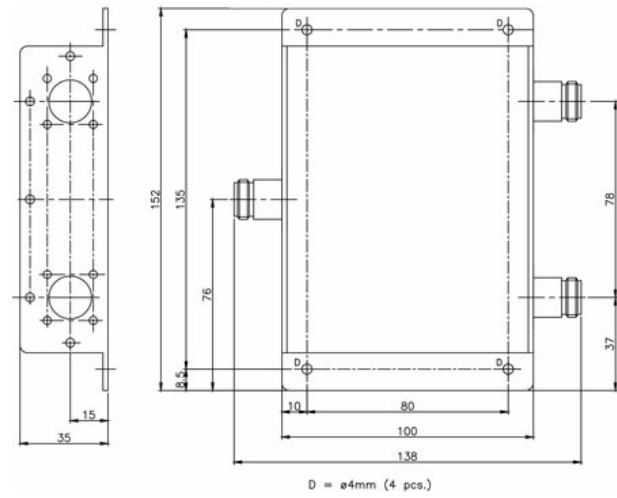
3 dB Version



10 dB Version



MOUNTING DETAILS



All dimensions are given in mm [in.]

