

2-Channel Hybrid Ring Combiner for 150 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 load as option).



SPECIFICATIONS

Electrical	
Filter Type	Hybrid Junction
Frequency	136 - 175 MHz (see ordering)
Max. Input Power	30 W per channel (max. 100 W with larger load)
Insertion Loss	< 3.3 dB @ 3 MHz BW < 3.5 dB @ 6 MHz BW
Impedance	50 Ω
Isolation Tx1 - Tx2	> 35 dB @ 3 MHz BW > 30 dB @ 6 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(f) (other on request)
Dimensions	210 x 85 (incl. conn.) x 42 mm (excl. load) / 8.30 x 3.35 x 1.65 in.
Weight	Approx 0.7 kg / 1.54 lb. (excl. load)
Environmental	
Operating temperature range	-30 °C to +60 °C

ORDERING

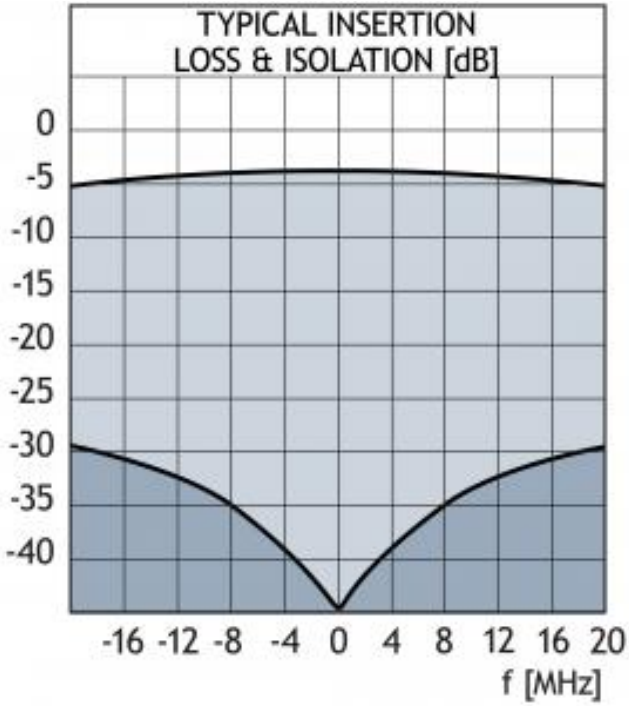
Model	Product No.	Frequency
PRO-PHY150-2-1	210000538	136 - 142 MHz
PRO-PHY150-2-2	210000878	140 - 146 MHz
PRO-PHY150-2-3	210000590	144 - 150 MHz
PRO-PHY150-2-4	210000544	148 - 154 MHz
PRO-PHY150-2-5	210000571	152 - 158 MHz
PRO-PHY150-2-6	210000572	156 - 162 MHz
PRO-PHY150-2-7	210000537	160 - 166 MHz
PRO-PHY150-2-8	210000545	164 - 170 MHz
PRO-PHY150-2-9	210000548	168 - 174 MHz
PRO-PHY150-2-10	210000629	172 - 178 MHz

NOTE

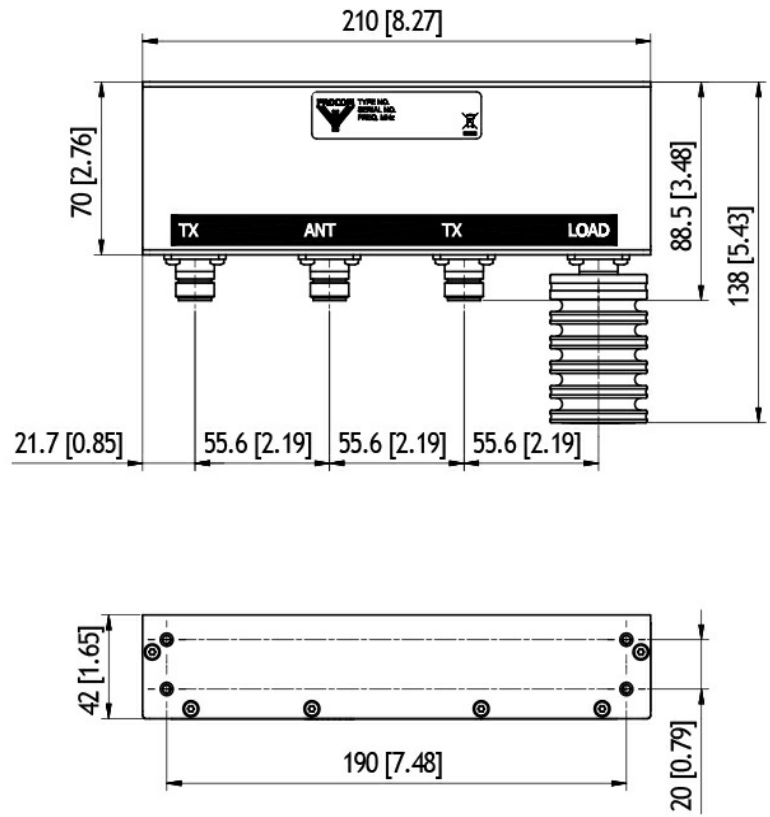
* The isolation between the Tx ports is directly dependent on the terminating VSWR on the antenna port. With an antenna load VSWR = 1.5, the isolation between the two Tx ports will be reduced to 20 dB @ 3 MHz bandwidth.

** 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 CURVE



MOUNTING DETAILS



All dimensions are given in mm [in.]

