PRO-PHY450-2

2-Channel Hybrid Ring Combiner for 450 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.
- 60 W load supplied (other loads or no load as option).



ORDERING DESIGNATIONS

TYPE	PRODUCT NO.	FREQ. RANGE
PRO-PHY450-2-TETRA	210001126	380 - 400 MHz
PRO-PHY450-2-1	210000580	400 - 420 MHz
PRO-PHY450-2-2	210000546	415 - 435 MHz
PRO-PHY450-2-3	210000579	430 - 450 MHz
PRO-PHY450-2-4	210000542	445 - 465 MHz
PRO-PHY450-2-5	210000570	460 - 480 MHz

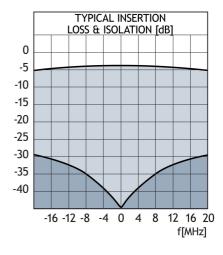
SPECIFICATIONS

ELECTRICAL		
FILTER TYPE	Hybrid Ring Junction	
FREQUENCY	380 - 475 MHz (see table)	
MAX. INPUT POWER	50 W per channel (max. 150 W with larger load)	
INSERTION LOSS	< 3.4 dB @ 10 MHz BW < 3.7 dB @ 20 MHz BW	
ISOLATION TX 1-TX 2 (*see note)	> 35 dB @ 10 MHz BW > 30 dB @ 20 MHz BW	
IMPEDANCE	Nom. 50 Ω	
LOAD (**see note)	60 W load fitted (other ratings available)	
SWR	$<$ 1.5 with all other ports terminated with 50 Ω	
MECHANICAL		
TEMP. RANGE	-30° C → +60° C	
CONNECTORS	N-female (other types as option)	
DIMENSIONS (L x W x H)	216 x 89 (incl. conn.) x 42 mm (excl. load)	
WEIGHT	Approx. 700 g (excl. load)	

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

E.g.: With 50 W input in total for the two channels, the load should be able to dissipate 50 W \times 1/2 = 25 W.

TYPICAL RESPONSE CURVE





 $\ensuremath{\mathsf{PROCOM}}$ A/S reserve the right to amend specifications without prior notice.

11/12/12



^{**}The SWR of the loads should be < 1.1! The load should be able to dissipate 1/2 of the total input power.