Diplexer for the 0 - 1000 MHz and 1550 - 2500 MHz Ranges

DESCRIPTION

- Diplexer for combining or splitting the two ranges 0 - 1000 MHz and 1550 - 2500 MHz.
- Excellent wide-band coverage.
- N-connections on all ports.

ORDERING

Model	Product No.	Description
PRO-DIPX 1000/1550-DC-L XS	200001622	DC Pass: Low port
PRO-DIPX 1000/1550-DC-H XS	200001998	DC Pass: High port
PRO-DIPX 1000/1550-DC-LH XS	200001999	DC Pass: Low end high port
PRO-DIPX 1000/1550-NO-DC XS	200002000	No DC pass

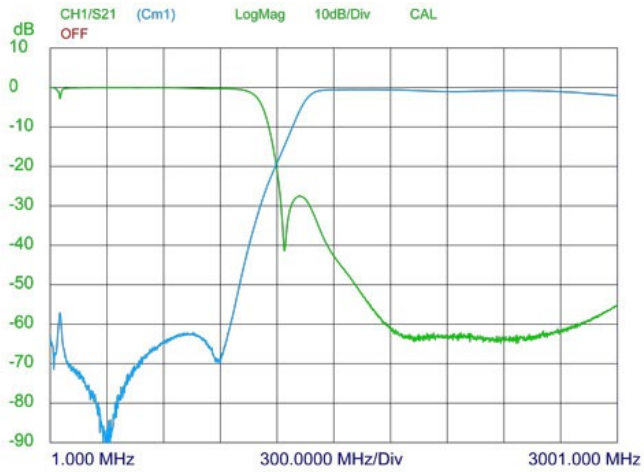
SPECIFICATIONS

Electrical	
Model	PRO-DIPX 1000/1550-... XS
Frequency	Low port : 0 - 1000 MHz High port : 1550 - 2500 MHz
Max. Input Power	35 W each port
Insertion Loss	0 - 1000 MHz : ≤ 0.8 dB typ. ≤ 0.6 dB 1550 - 2500 MHz: ≤ 1.0 dB typ. ≤ 0.8 dB
Impedance	50 Ω
Isolation	Low to high port: ≥ 45 dB typical 50 dB
VSWR	≤ 1.5:1 on all ports

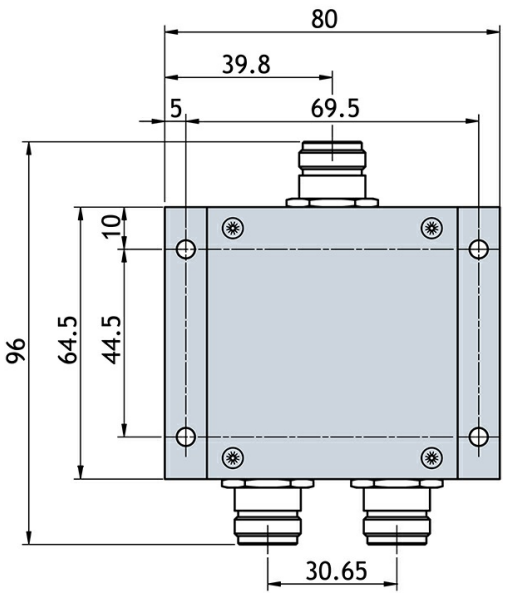
Mechanical	
Connection(s)	Low : N(f) High : N(f) Antenna: N(f)
Dimensions	96 x 32 x 80 mm / 3.78 x 1.26 x 3.15 in.
Weight	0.35 kg / 0.77 lb
Mounting	4.3 mm dia. / ø0.17 in. (4 holes)

Environmental	
Operating Temperature Range	-30°C to +70°C
Ingress Protection	IP64

TYPICAL RESPONSE CURVES



MOUNTING DETAILS



INSTALLATION

The PRO-DIPX 1000/1550-... XS makes it possible to use only one antenna for the operation of two transceivers (one in each range). See the figure below. The antenna must be a dual-frequency antenna, i.e. it must be resonant on the actual frequencies in the two bands. The transceivers may be used independently and will have no degrading influence on each other. Typically, the diplexer is installed next to the transceivers and only one cable is used between the diplexer and the antenna. The diplexer is suitable both for base station and mobile use. The main tasks of the diplexer are to protect the individual receiver input from being destroyed by the transceiver in the contrary band and to ensure a low-loss path between the transceiver and the antenna which is not loaded by the other branch.
The diplexer can be operated together with any set of transceivers operating within the 0 - 1000 MHz and 1550 - 2500 MHz frequency bands.
Dual-frequency antennas are available for both mobile and base station applications.