Diplexer for the 0 - 88 MHz and 136 - 960 MHz Ranges

DESCRIPTION

- Diplexer for combining or splitting the two ranges 0 - 88 MHz and 136 - 960 MHz.
- Excellent wide-band coverage – usable for a lot of applications.
- N-connections on all terminals.

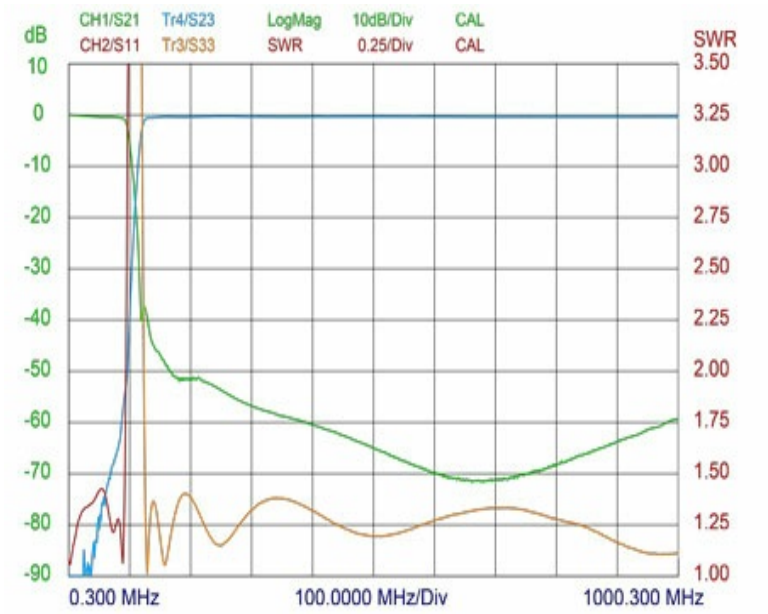
SPECIFICATIONS

Electrical	
Model	PRO-DIPX 88/136-N
Frequency	Low port : 0 - 88 MHz High port : 136 - 960 MHz
Max. Input Power	35 W
Insertion Loss	0 - 88 MHz : 0.7 dB 136 - 960 MHz : 0.7 dB
Impedance	50 Ω
Isolation	Low to high port : ≥ 40 dB
VSWR	< 1.5:1

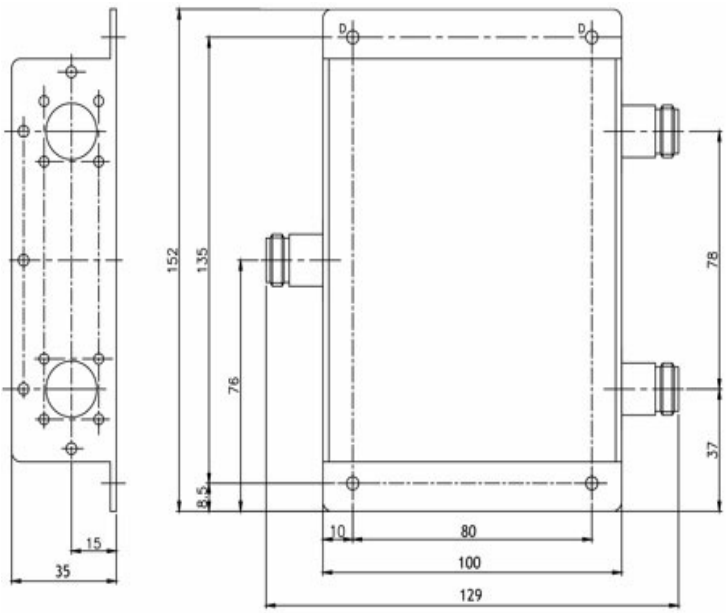
Mechanical	
Connection(s)	Low : N(f) High : N(f) Antenna : N(f)
Dimensions	129 (incl. connectors) x 152 (incl. flanges) x 35 mm / 5.23 (incl. connectors) x 5.98 (incl. flanges) x 1.38 in.
Weight	Approx. 0.325 kg / 0.72 lb.

Environmental	
Operating temperature range	-30 °C to +70 °C
Ingress Protection	IP64

TYPICAL RESPONSE CURVE



MOUNTING DETAILS



All dimensions are given in mm.

INSTALLATION

The PRO-DIPX 88/136-N 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, that is, 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 - 88 MHz and 136 - 960 MHz frequency bands.

Dual-frequency antennas are available for both mobile and base station applications.