

Diplexer for the 0 - 108 MHz and 136 - 1300 MHz
Ranges

DESCRIPTION

- > Diplexer for combining or splitting the two ranges 0 - 108 MHz and 136 - 1300 MHz.
- > Excellent wide-band coverage – usable for a lot of applications.
- > Very small dimensions, mounted in a 45 x 50 mm / 1.77 x 1.97 in. box.
- > Provided with dual adhesive pad for quick installation.
- > Available with SMA or BNC connector types.
- > Coated with black vinyl to prevent corrosion.



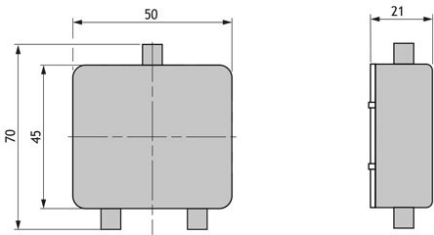
SPECIFICATIONS

Electrical		
Model	DIPX 108/136-...	
Frequency	Low port : 0 - 108 MHz High port : 136 - 1300 MHz	
Max. Input Power	25 W each port	
Insertion Loss	0 - 108 MHz : < 1.0 dB 136 - 1300 MHz: < 0.8 dB	
Impedance	50 Ω	
Isolation	Low to high port > 37 dB	
VSWR	Low port: 0 - 108 MHz: ≤ 1.5:1 High port: 136 - 1000 MHz: ≤ 1.5:1 1000 - 1300 MHz: ≤ 1.8:1	Low port: 0 - 108 MHz: ≤ 1.5:1 High port: 136 - 1000 MHz: ≤ 1.5:1 1000 - 1300 MHz: ≤ 1.8:1
Mechanical		
Connection(s)	See ordering designations	
Dimensions	50 x 21 x 70 mm / 1.97 x 0.83 x 2.76 in. (BNC, SMA) 50 x 21 x 51 mm / 1.97 x 0.83 x 2.0 in. (FME)	
Weight	Approx. 0.065 kg / 0.14 lb.	
Environmental		
Operating Temperature Range		-30°C to +60°C
Ingress Protection		IP41

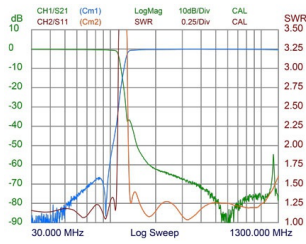
ORDERING

Model	Product No.
DIPX 108/136-SMA(f)	200002657
DIPX 108/136-BNC(f)	200000705

MECHANICAL OUTLINE



TYPICAL RESPONSE CURVES



INSTALLATION

The DIPX 108/136 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 - 108 MHz and 136 - 1300 MHz frequency bands.

