# Diplexer for the 0 - 500 MHz and 800 - 2500 MHz Ranges

## DESCRIPTION

- Diplexer for combining or splitting the two ranges 0 - 500 MHz and 800 - 2500 MHz.
- Excellent wide-band coverage – usable for a lot of applications.
- Extremely small dimensions.
- Quick installation using dual-adhesive pad (provided).
- FME-connections on all terminals.


## ORDERING

| Type | Product No. |
|---|---|
| DIPX 500/800-2.5G | 200000790 |

## SPECIFICATIONS

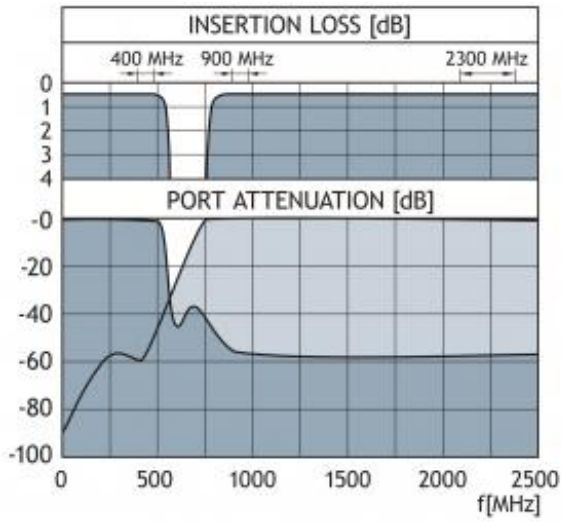
| Electrical | |
|---|---|
| Model | DIPX 500/800-2.5G |
| Frequency | Ant-low port : 0 - 500 MHz<br>Ant-high port : 800 - 2500 MHz |
| Insertion Loss | Ant-low port: 0 - 500 MHz : < 0.5 dB typ. < 0.3 dB<br>Ant-high port:<br>800 - 2000 MHz: < 0.9 dB typ. < 0.4 dB<br>2000 - 2500 MHz: < 1.0 dB typ. < 0.7 dB |
| Impedance | 50 Ω |
| Isolation | Low to high port:<br>0 - 500 MHz: > 45 dB typ. > 50 dB<br>800 - 2500 MHz: > 40 dB typ. > 50 dB |
| Maximum Input Power | Ant-low port: 20 W<br>Ant-high port: 15 W |

| Mechanical | |
|---|---|
| Connection(s) | Low : FME<br>High : FME<br>Antenna: FME |
| Dimensions | 50 x 21 x +50 mm |
| Weight | 0.06 kg / 0.13 lb |
| Mounting | Fitted with dual-adhesive pad at the bottom of box |

| Environmental | |
|---|---|
| Operating Temperature Range | -30 °C to +60 °C |

## ADDITIONAL DATA

### TYPICAL RESPONSE CURVES




The DIPX 500/800-2.5G 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 - 500 MHz and 800 - 2500 MHz frequency bands.

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