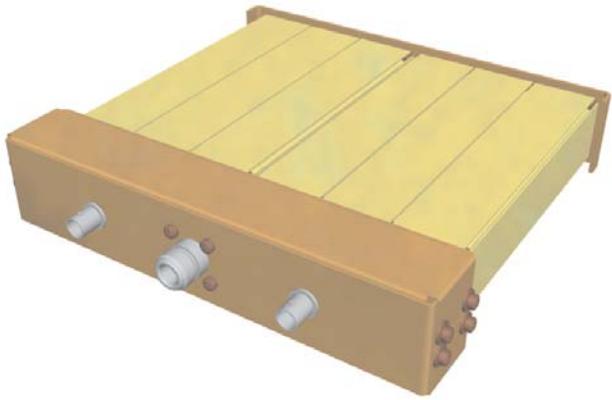




# Helical Duplexers

HDF86.Q34



The helical duplexer HDF86.Q34 is a symmetrical duplexer made of six High Q helical resonators in a Band-reject configuration. The duplexer is designed for the operation of the transmitter and receiver together in to one antenna in bands of 66-88 MHz.

Its mechanical construction make the use even in base or in mobile radiostations possible.

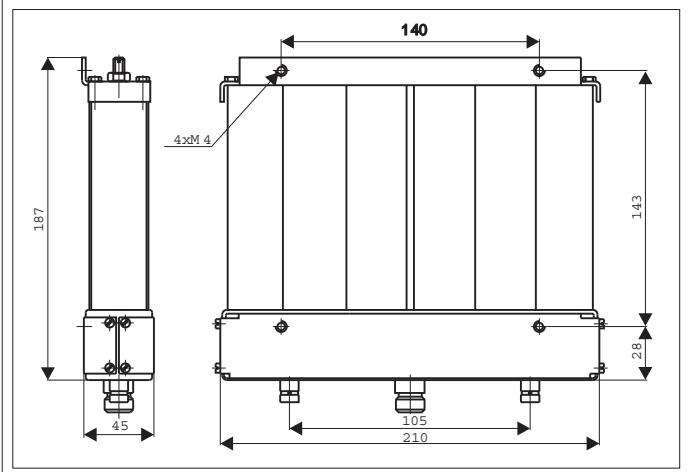
This configuration provides 75 dB of transmitter-to-receiver isolation, and low insertion loss permits power handling up to 50 watts.

When ordering, specify exact frequencies and connector type required (N or BNC).

Order example:

HDF86.Q34 75.15 / 78.65 / 0.5 / BNB  
LOW freq.[MHz] HIGH freq.[MHz] Bandwidth[MHz] Connectors

N....N Type  
B....BNC Type  
T....TNC Type



## ELECTRICAL PARAMETERS

|                                  |                                  |     |     |
|----------------------------------|----------------------------------|-----|-----|
| Frequency range [MHz]            | 66-88                            |     |     |
| Frequency separation [MHz]       | 4.0-6.5                          |     |     |
| Operated Bandwidth [MHz]         | 0.5                              | 1.0 | 1.5 |
| Max.insertion loss [dB]          | 1.3                              | 1.5 | 1.7 |
| Typ. Insertion loss [dB]         | 1.1                              | 1.3 | 1.5 |
| Isolation LOW-ANT [dB]           | 85                               | 80  | 75  |
| Isolation HIGH-ANT [dB]          | 85                               | 80  | 75  |
| Isolation LOW-HIGH [dB]          | 85                               | 80  | 75  |
| VSWR                             | <1.3                             |     |     |
| Input and Output impedance [Ohm] | 50                               |     |     |
| Max. Input power [W]             | 50W (-30 +60°C) / 35 (-30 +70°C) |     |     |

## MECHANICAL PARAMETERS

|                      |   |
|----------------------|---|
| Connection           | ANT-N female, LOW (HIGH) - BNC female, TNC female, N female |
| Mouting holes        | 4xM4  |
| Dimension HxWxL [mm] | 45x210x187  |
| Weight [kg]          | 1.5   |