

Multiband Diplexer

TETRA / DVB-H Diplexer for Channel 21 ... 50

Connectors: 7-16 female (50 Ohms)
CECC 22190

Frequency range:
Port 1 Range 1 380 – 400 MHz
Port 2 Range 2 470 – 710 MHz

Insertion loss:
Port 1 ↔ Port 3 ≤ 0.4 dB
Port 2 ↔ Port 3 ≤ 0.4 dB

Isolation:
Port 1 ↔ Port 2 ≥ 50 dB

VSWR:
Port 1 Range 1 ≤ 1.2
Port 2 Range 2 ≤ 1.2
Port 3 Range 1/2 ≤ 1.3

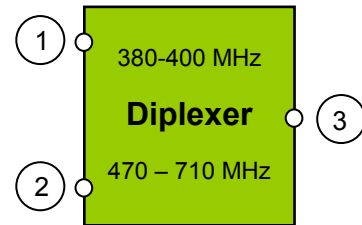
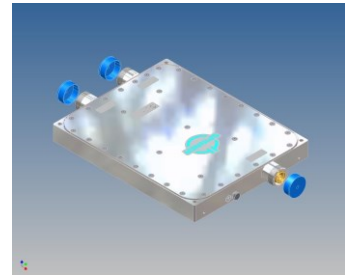
Power rating:
Port 1 ≤ 200 W
Port 2 ≤ 200 W

DC path: between all Ports
I_{max}/U_{max} 5 A / ± 30 V

Degree of protection: IP 65

Temperature range: -30°C to +55°C

Weight: 4.5 kg

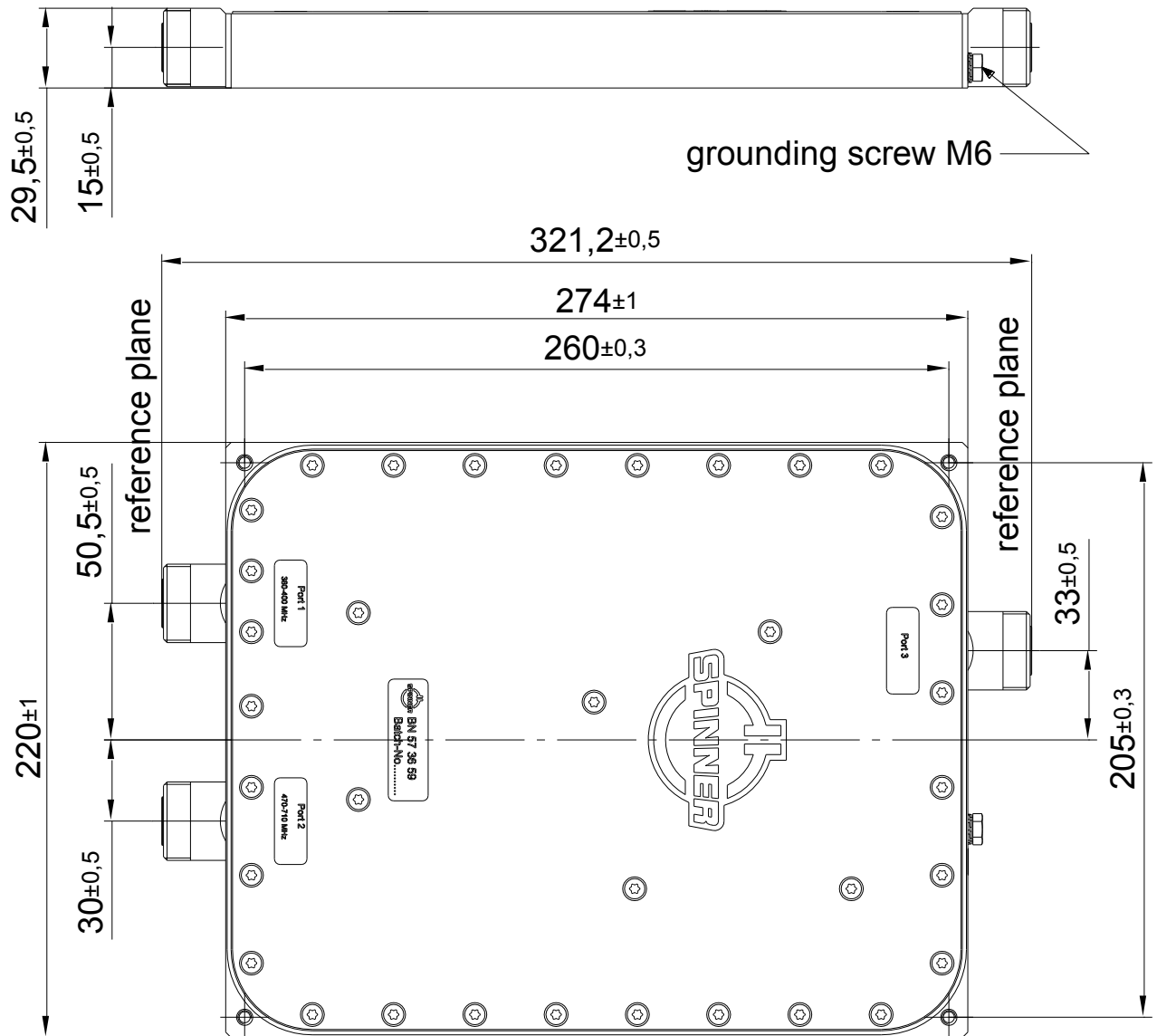


Block Diagram

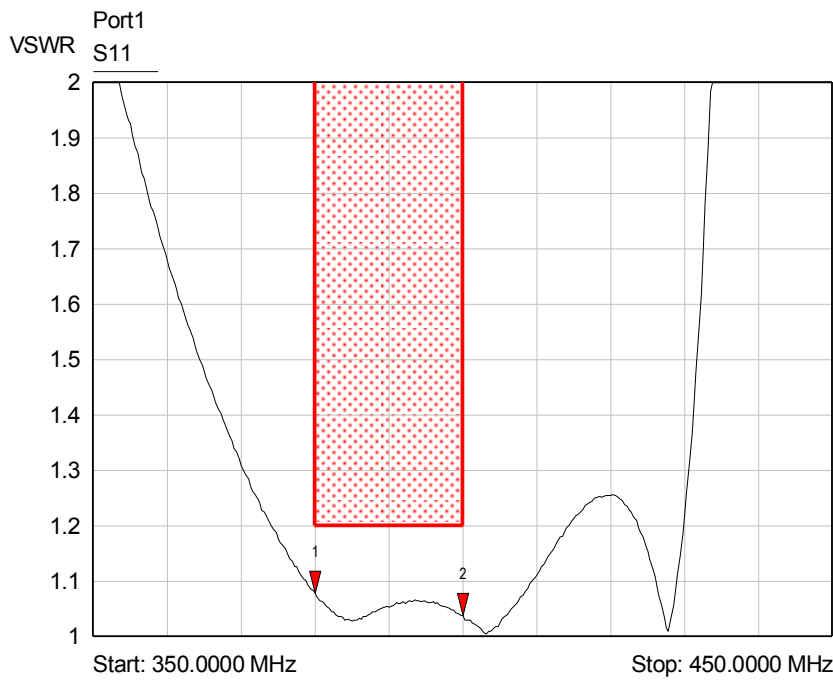
Appendix

Dimensions
Measurements for VSWR
Insertion loss
Isolation

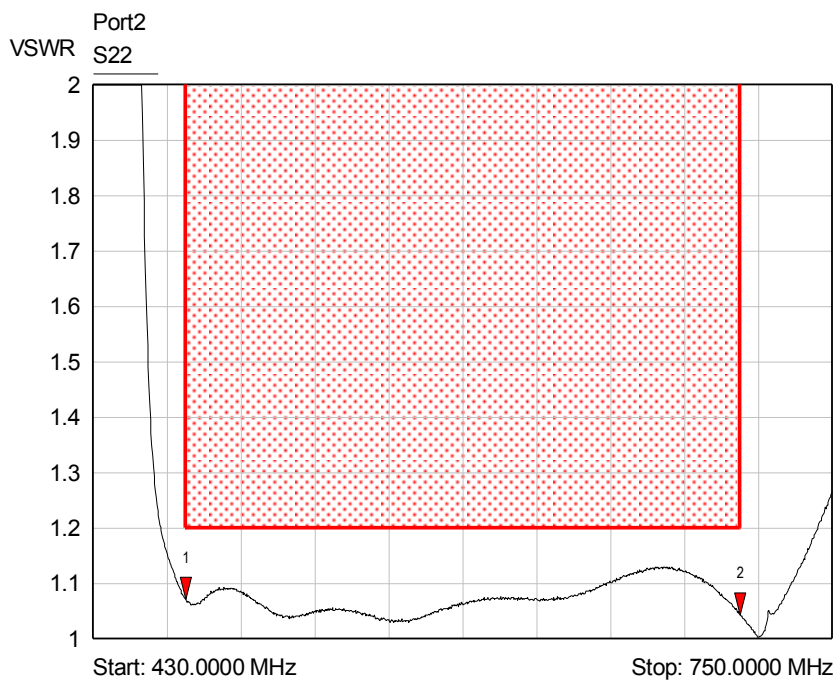
Dimensions



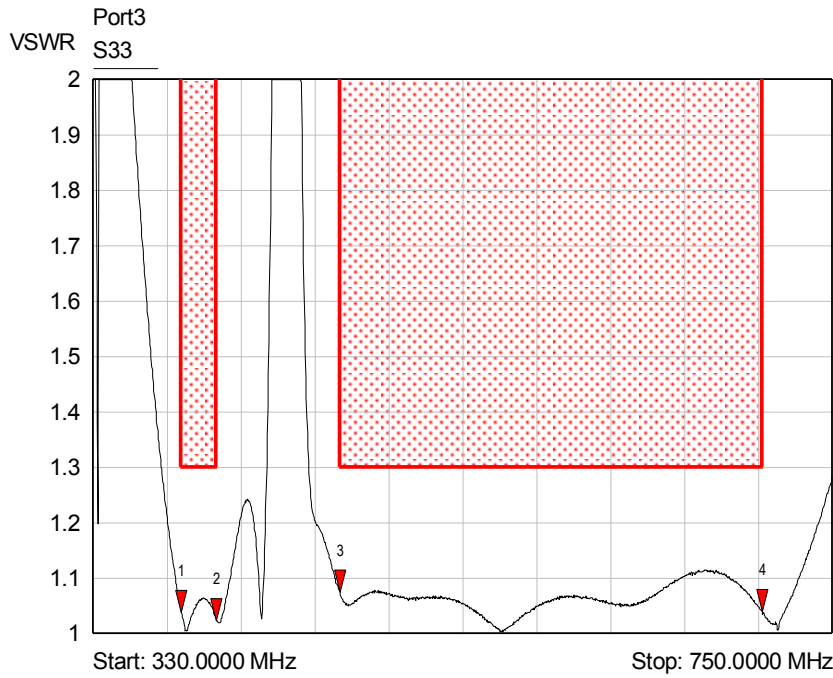
VSWR



- 1 S11
▼ 380.0000 MHz
1.08 VSWR
- 2 S11
▼ 400.0000 MHz
1.04 VSWR

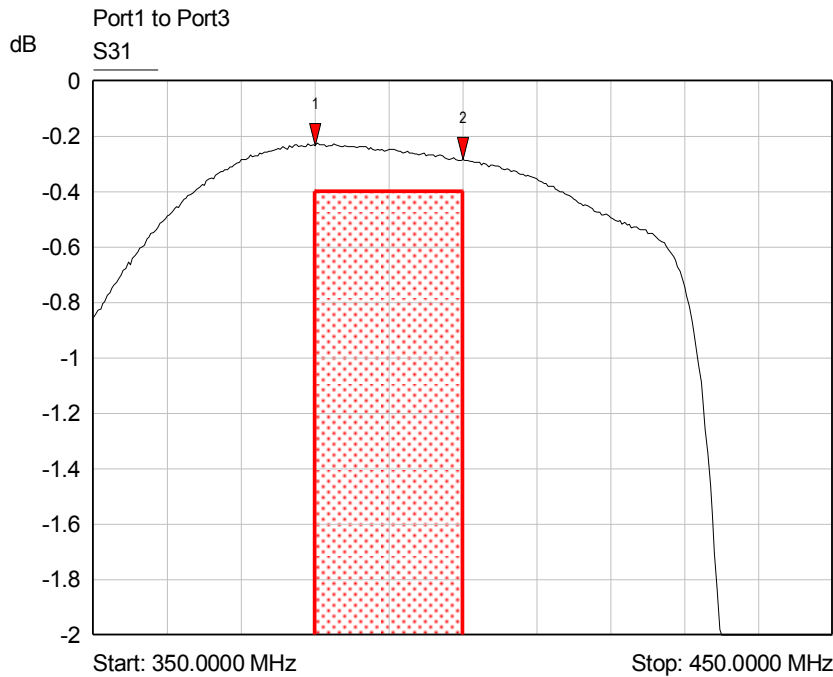


- 1 S22
▼ 470.0000 MHz
1.07 VSWR
- 2 S22
▼ 710.0000 MHz
1.04 VSWR

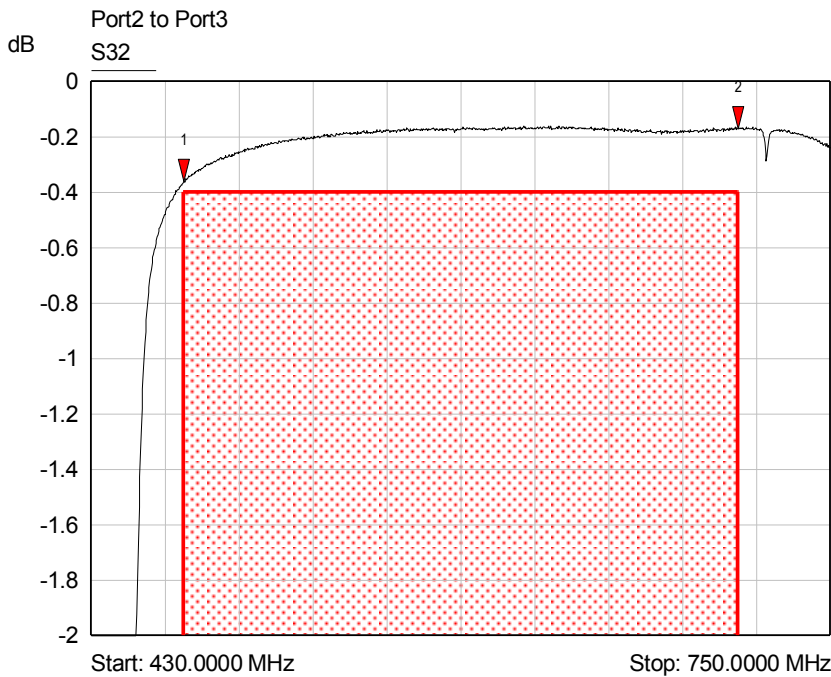


- 1 S33
▼ 380.0000 MHz
1.04 VSWR
- 2 S33
▼ 400.0000 MHz
1.02 VSWR
- 3 S33
▼ 470.0000 MHz
1.08 VSWR
- 4 S33
▼ 710.0000 MHz
1.04 VSWR

Insertion loss

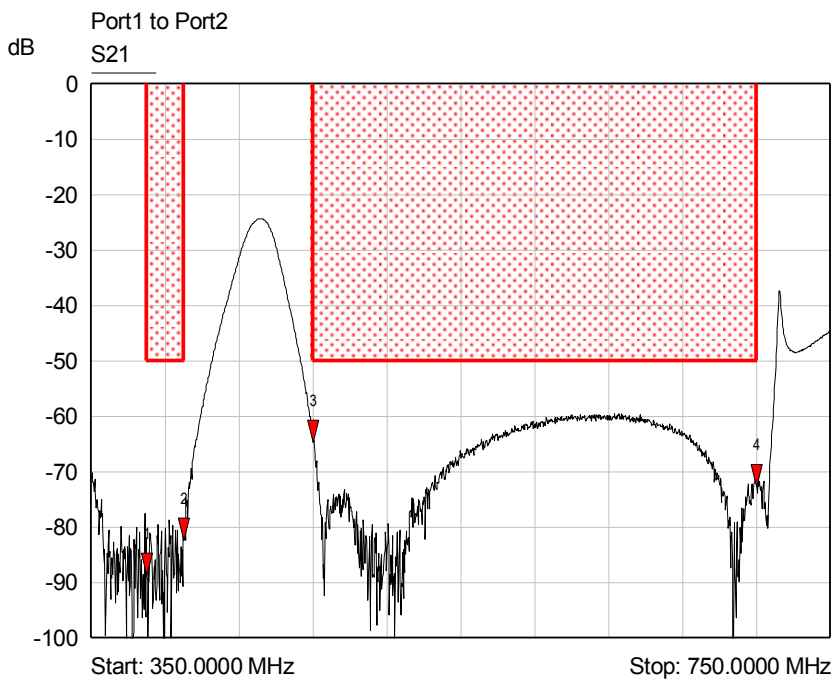


- 1 S31
▼ 380.0000 MHz
-0.23 dB
- 2 S31
▼ 400.0000 MHz
-0.28 dB



- 1 S32
▼ 470.0000 MHz
-0.36 dB
- 2 S32
▼ 710.0000 MHz
-0.17 dB

Isolation



- 1 S21
▼ 380.0000 MHz
-88.75 dB
- 2 S21
▼ 400.0000 MHz
-82.37 dB
- 3 S21
▼ 470.0000 MHz
-64.61 dB
- 4 S21
▼ 710.0000 MHz
-72.73 dB