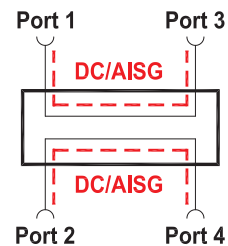
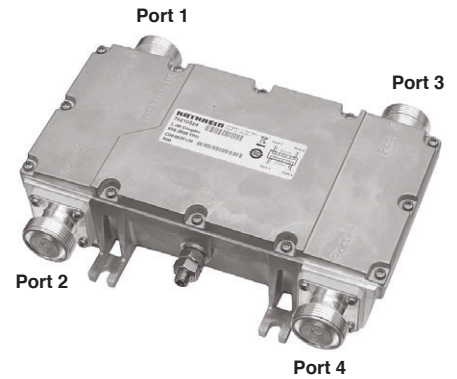


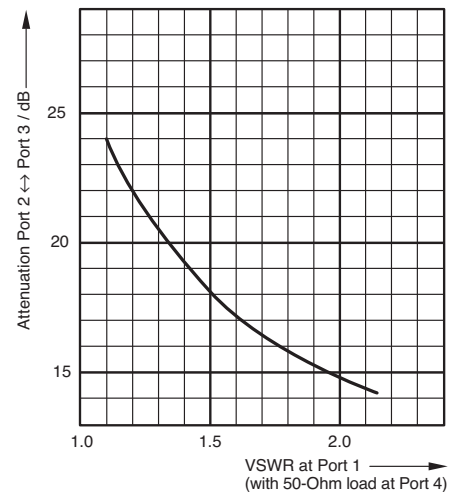
3-dB Coupler Hybrid Combiner 2 : 2 698 – 2690 MHz

- Can be used for the decoupled combining of 2 transmitters onto a common antenna with frequency spacing as narrow as desired (3 dB loss) – see application example 1
- Can be used for the decoupled combining of 2 transmitters onto two antennas with frequency spacing as narrow as desired – see application example 2
- Can be used as a decoupled 2-way splitter – see application example 3
- Can be used as a frequency-independant 90° phase shifter (90° Hybrid)
- Suitable for indoor or outdoor applications
- DC/AISG by-pass
- External DC stop available as an accessory



Diagram

Typical attenuation Port 2 ↔ Port 3 vs. VSWR at Port 1



Technical Data

Type No.	782 10524
Frequency range	698 – 2690 MHz
Attenuation	
Port 1 ↔ Port 2	3.1 ±0.5 dB
Port 1 ↔ Port 3	3.1 ±0.5 dB
Port 2 ↔ Port 3	See diagram
Directivity	> 20 dB
VSWR	< 1.25
Impedance	50 Ω
Input power	< 150 W at each input port
Intermodulation products	< -160 dBc (3 rd order; with 2 x 20 W)
Temperature range	-40 ... +70 °C
Connectors	7-16 female
Application	Indoor or outdoor (IP66)
DC/AISG transparency	By-pass between Port 1 ↔ Port 3 / Port 2 ↔ Port 4 (max. 2500 mA) External DC stop available as an accessory
Mounting	With 4 screws (max. 6.5 mm diameter)
Weight	1.5 kg
Packing size	268 x 115 x 203 mm
Dimensions (w x h x d)	205.4 x 60 x 104 mm (without connectors and mounting feet)

Note:

VSWR and attenuation values only valid if all ports are terminated with 50-Ohm loads.

Accessories (order separately)

Type No.	Description
782 10850	DC stop
782 10474	50-Ohm load (80 W)
784 10367	50-Ohm load (1.5 W)

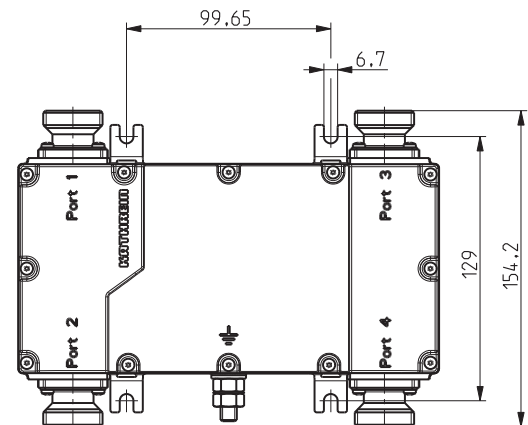
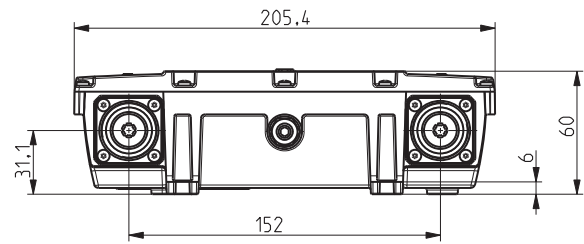
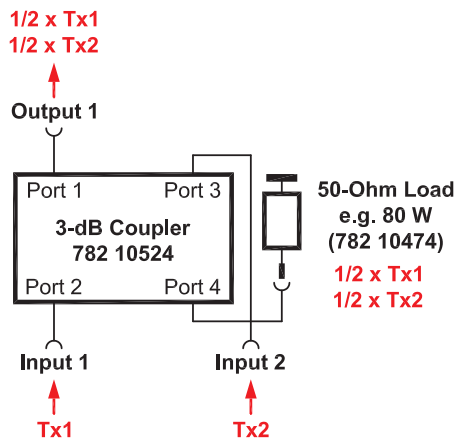


936.4198 Subject to alteration.

3-dB Coupler Hybrid Combiner 2 : 2 698 – 2690 MHz

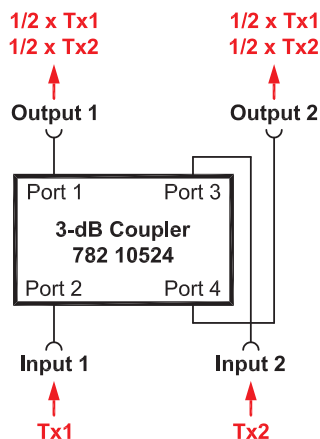
Application Example 1: Hybrid Combiner 2:1

Tx1 and Tx2 signals combined onto **one** output (antenna)
Half the power dissipated in absorber
(suitably dimensioned 50-Ohm load required - to be ordered separately)



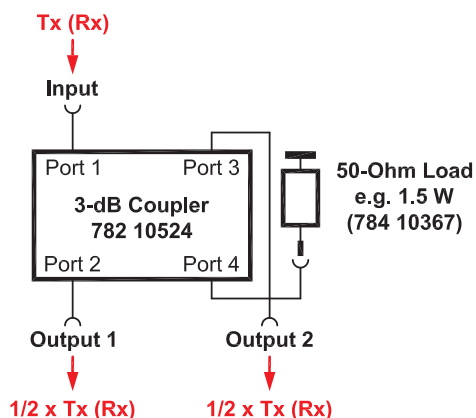
Application Example 2: Hybrid Combiner 2:2

Tx1 and Tx2 signals combined and distributed equally
onto **two** outputs (antennas)



Appl. Example 3: Decoupled 2-way Splitter

Tx (or Rx) signal distributed equally onto two outputs
(suitably dimensioned 50-Ohm load required - to be ordered separately)



Please note:

As a result of more stringent legal regulations and judgements regarding product liability, we are obliged to point out certain risks that may arise when products are used under extraordinary operating conditions.

Extraordinary operating conditions, such as heavy icing or exceptional dynamic stress (e.g. strain caused by oscillating support structures), may result in the breakage of a mast mounted device or even cause it to fall to the ground.

These facts must be considered during the site planning process.

The 3-dB Coupler is designed to operate under the environmental conditions as described in ETS 300 019-1-4 class 4.1 E and have passed environmental tests as recommended in ETS 300 019-2-4.

The installation team must be properly qualified and also be familiar with the relevant national safety regulations.

The details given in our data sheets have to be followed carefully when installing the coupler and accessories.

The limits for the coupling torque of RF connectors, recommended by the connector manufacturers must be obeyed.

Any previous datasheet issues have now become invalid.

