

The 3-dB coupler can be used:

- As a decoupled power splitter with a ratio of 1:1
- For the decoupled combining of two transmitters with a frequency spacing as narrow as desired (at 3 dB loss)
- For the decoupled combining of two receivers with frequency spacing as narrow as desired
- For the decoupled combining of two transmitter/receiver units, whose integrated duplexers are within the same frequency range
- As a frequency-independent 90° phase shifter
- As a component to form combiners

Function:

The 3-dB coupler has four ports, two of which are decoupled from each other. For example, effective power entering into port 1 is distributed into ports 2 and 3. Port 4 is decoupled and without power if ports 2 and 3 are ideally matched. In practice an absorber of suitable power at port 4 is to be planned in accordance with the mismatch of ports 2 and 3.

Decoupled combining can be achieved via the diagonally opposite ports 2 and 3 or 1 and 4.

For indoor use.

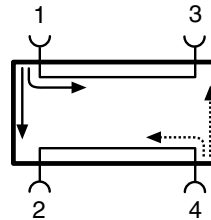


Diagram I

Typical attenuation between ports 1 ↔ 2 resp. 1 ↔ 3 vs. frequency

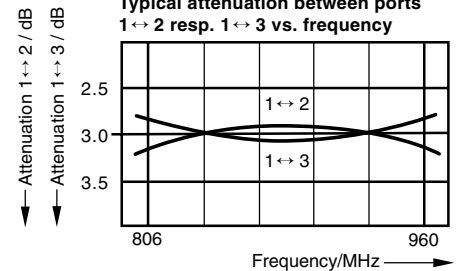
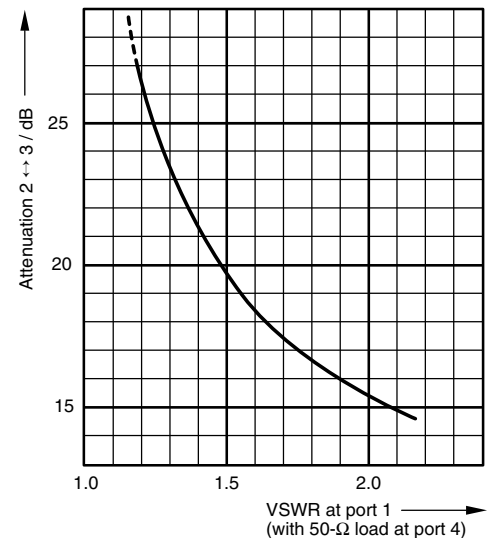


Diagram II

Typical attenuation 2 ↔ 3 vs. VSWR at port 1



Specifications:

Frequency range	806–960 MHz
VSWR*	<1.1:1
Impedance	50 ohms
Attenuation* 1↔2 / 1↔3	3 ±0.4 dB (see diagram I)
Attenuation* 2↔3	See diagram II
Directivity	>30 dB
Maximum input power	<500 watts total power two inouts with max. 350 watts at one input
Connector	N or 7/16 DIN female
Weight	1.3 lb (0.6 kg)
Dimensions including connectors	6.2 x 3.7 x 2.2 inches max. (157 x 95 x 55 mm)
Shipping dimensions	6.7 x 4.1 x 3.1 inches (170 x 105 x 80 mm)
Mounting	Mounts using two screws (max. 5 mm diameter).

*VSWR and attenuation values are measured when the remaining ports are terminated with 50 ohm loads.

Order Information:

Model	Description
K637061	3 dB coupler with N female connectors
K637067	3 dB coupler with DIN female connectors



10864-A
936.1483/c

All specifications are subject to change without notice0