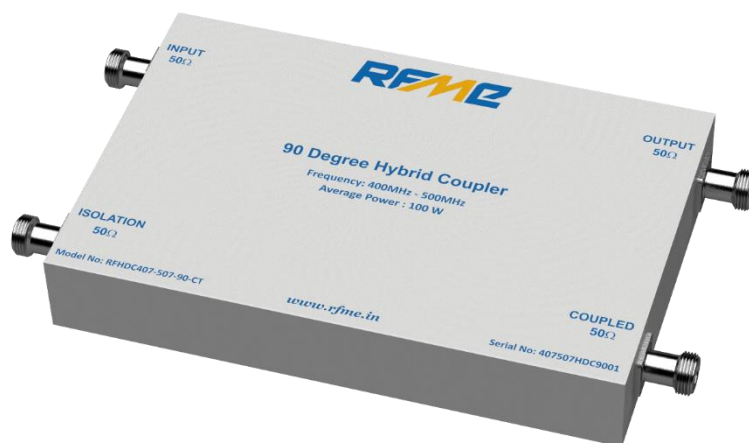


90 DEGREE HYBRID COUPLER

RFHDC407-507-90-CT

Features:

- 3kW Peak Power
- Excellent VSWR < 1.5:1
- High Isolation > 19dB
- Flat Coupling
- Low Insertion Loss < 1dB
- Rigid Build Quality



Description:

The RFHDC407-507-90-CT is a Four Port device with frequency range of 400MHz to 500MHz. It offers High Input Power Capability with Low Phase and Amplitude Imbalance. Flat Coupling with Good VSWR and Military grade shielded design makes this product versatile for use in a various environment condition.

Applications:

- Amateur Radio
- M2M Communication
- ISM Band
- Military Applications
- Radar devices

Optional Accessories:

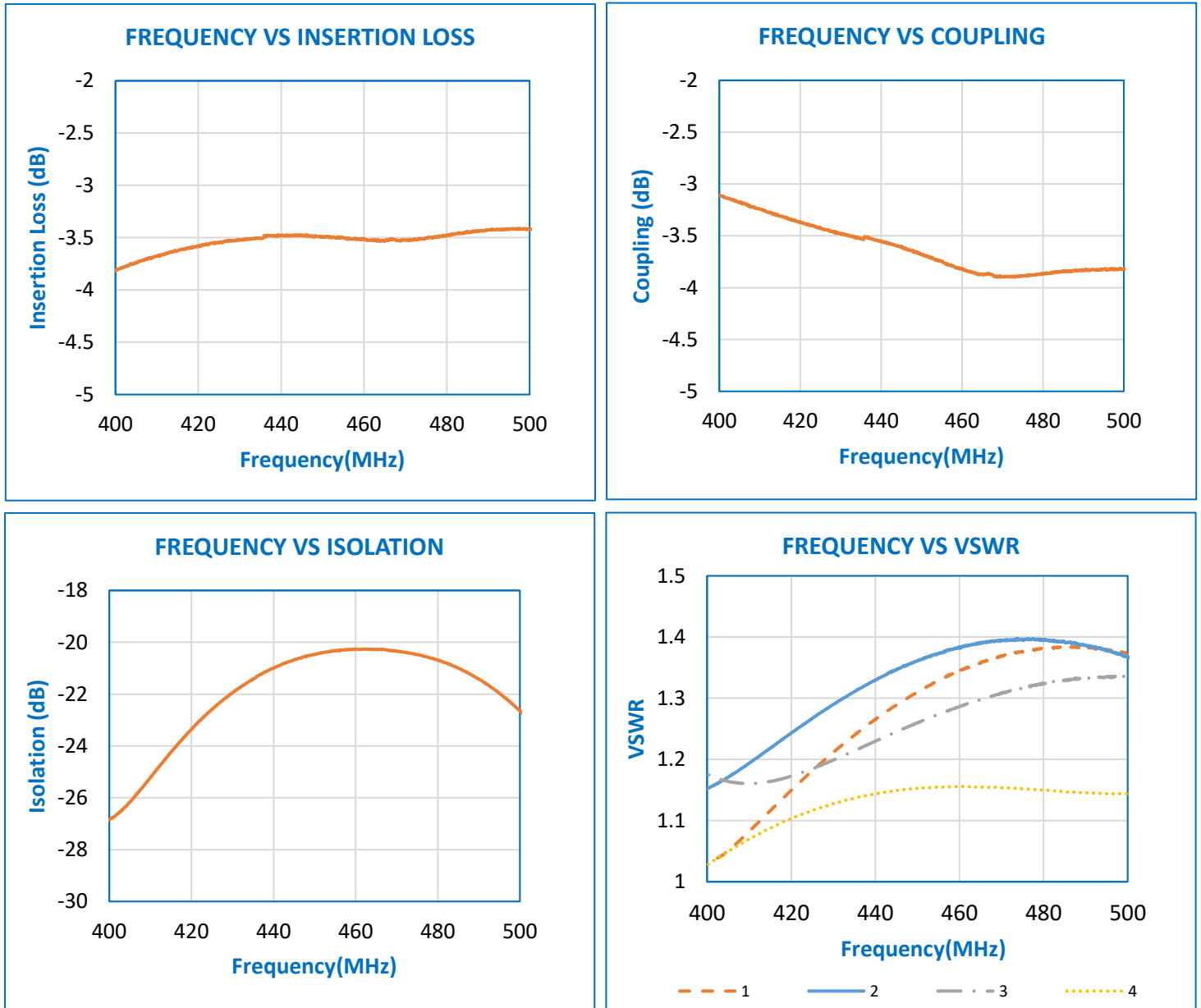
- 50Ω Termination (N Type)
- RF Adaptors (N-N):
 - N(M) – N(M)
 - N(M) – N(F)
 - N(F) – N(F)

Electrical Specifications:	
Frequency Range:	400 to 500 MHz
Insertion Loss:	-1dB (max.)
Average Power:	100W
Peak Power:	3kW
Isolation:	-19dB (min.)
Coupling:	-3dB
Coupling Flatness:	1dB (max.)
Amplitude Imbalance:	1dB (max.)
Phase Imbalance:	10° (max.)
VSWR:	< 1.5:1
Operating temperature:	-55 °C to 85 °C
In/Out Connector:	N Type(F)
In/Out Impedance:	50Ω
Weight:	2 kg
Test Conditions:	
Input Power:	0dBm
Typical Room Temperature:	25 °C

S Parameter Test Data:

Frequency (MHz)	Insertion Loss (dB)	Coupling (dB)	Isolation (dB)	VSWR			
	S ₂₁	S ₃₁	S ₄₁	1	2	3	4
400	-3.81	-3.11	-26.84	1.04	1.15	1.18	1.03
410	-3.67	-3.24	-25.22	1.08	1.19	1.16	1.07
420	-3.58	-3.36	-23.36	1.15	1.24	1.17	1.10
430	-3.52	-3.48	-21.94	1.21	1.29	1.20	1.13
440	-3.48	-3.56	-21.00	1.27	1.33	1.23	1.14
450	-3.50	-3.68	-20.47	1.31	1.36	1.26	1.15
460	-3.51	-3.81	-20.27	1.35	1.38	1.29	1.16
470	-3.52	-3.89	-20.34	1.37	1.39	1.31	1.15
480	-3.48	-3.87	-20.68	1.38	1.39	1.32	1.15
490	-3.43	-3.83	-21.42	1.38	1.39	1.33	1.15
500	-3.42	-3.82	-22.64	1.37	1.37	1.34	1.14

S Parameter Test Graphs:



Mechanical Dimensions:

