



Mini-Circuits

MMIC SURFACE MOUNT

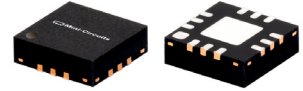
Power Splitter/Combiner

WP4N+

4 Way-0° 50Ω 1215 to 1900 MHz

FEATURES

- Excellent Isolation, Typ. 23 dB
- Excellent Phase Unbalance, Max. 5 deg.
- Excellent Amplitude Unbalance, Max. 0.5 dB
- Small Size, 3x3 mm
- High ESD Level
- Aqueous Washable



Generic photo used for illustration purposes only

CASE STYLE: DQ1225

+RoHS CompliantThe +Suffix identifies RoHS Compliance.
See our website for methodologies and qualifications

APPLICATIONS

- GPS
- WCDMA
- PCS

ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Units
Frequency Range		1215		1900	MHz
Insertion Loss* (Above 6.0 dB)	1215-1900		0.7	1.9	dB
Isolation	1215-1900	14	23		dB
Amplitude Unbalance	1215-1900			0.5	dB
Phase Unbalance	1215-1900			5	deg.
VSWR (Port S)	1215-1900		1.5		:1
VSWR (Ports 1,2,3,4)	1215-1900		1.4		:1

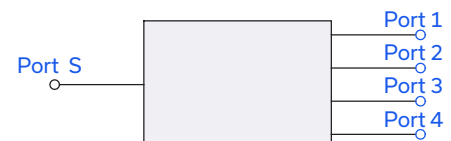
* Includes fixture loss, 0.15 dB typ. Max value increases to 2.5 dB below 1315 MHz.

ABSOLUTE MAXIMUM RATINGS

Parameter	Ratings
Operating Temperature	-40°C to +85°C
Storage Temperature	-65°C to +150°C
Power Input (as a Splitter)	1.5 W max.
Internal Dissipation	0.375 W max.

Permanent damage may occur if any of these limits are exceeded.

ELECTRICAL SCHEMATIC



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www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

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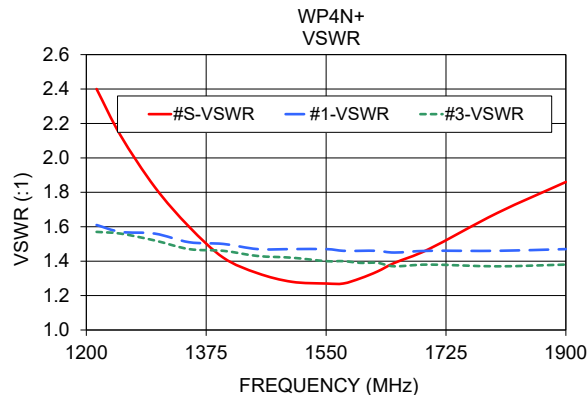
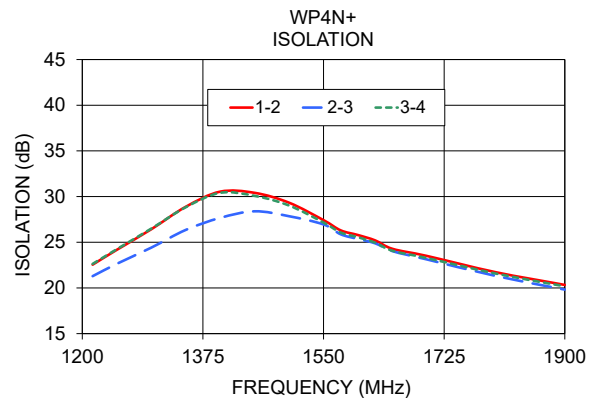
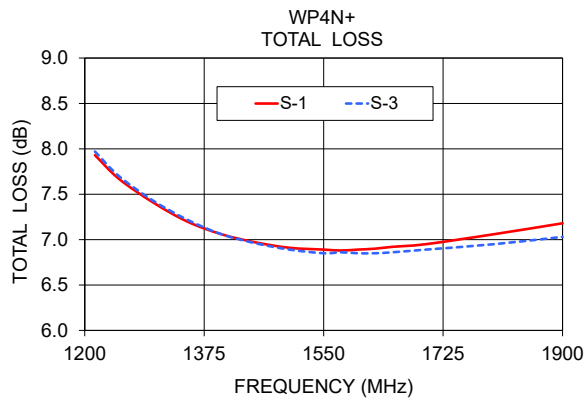
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4 Way-0° 50Ω 1215 to 1900 MHz

TYPICAL PERFORMANCE DATA AND CHARTS

Frequency (MHz)	Total Loss ¹ (dB)				Amplitude Unbalance (dB)	Isolation (dB)			Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2	VSWR 3	VSWR 4
	S-1	S-2	S-3	S-4		1-2	2-3	3-4						
1215.0	7.93	7.96	7.97	7.89	0.07	22.55	21.29	22.63	0.99	2.40	1.61	1.57	1.57	1.54
1250.0	7.67	7.69	7.70	7.64	0.06	24.17	22.64	24.24	0.77	2.13	1.57	1.57	1.56	1.52
1300.0	7.41	7.43	7.43	7.37	0.06	26.42	24.41	26.49	0.54	1.83	1.56	1.54	1.52	1.48
1350.0	7.20	7.21	7.22	7.17	0.05	28.88	26.35	28.83	0.28	1.60	1.51	1.50	1.47	1.45
1400.0	7.06	7.05	7.06	7.02	0.04	30.54	27.67	30.41	0.30	1.42	1.50	1.49	1.46	1.43
1450.0	6.97	6.95	6.96	6.94	0.03	30.41	28.39	30.08	0.45	1.33	1.47	1.47	1.43	1.41
1500.0	6.91	6.88	6.89	6.87	0.04	29.33	27.85	29.02	0.63	1.28	1.47	1.42	1.42	1.40
1550.0	6.89	6.84	6.85	6.85	0.04	27.42	26.95	27.16	0.98	1.27	1.47	1.44	1.40	1.39
1575.0	6.88	6.84	6.86	6.85	0.04	26.30	25.87	26.06	1.09	1.27	1.46	1.40	1.40	1.39
1600.0	6.89	6.84	6.85	6.87	0.05	25.79	25.36	25.55	1.07	1.30	1.46	1.39	1.39	1.38
1625.0	6.90	6.84	6.85	6.87	0.06	25.20	24.88	24.95	1.20	1.34	1.46	1.37	1.39	1.38
1650.0	6.92	6.84	6.86	6.87	0.08	24.28	24.03	24.07	1.27	1.39	1.45	1.39	1.37	1.38
1700.0	6.95	6.87	6.89	6.92	0.08	23.50	23.12	23.27	1.65	1.47	1.46	1.39	1.38	1.39
1800.0	7.06	6.95	6.95	7.02	0.12	21.72	21.31	21.57	2.01	1.68	1.46	1.36	1.37	1.42
1900.0	7.18	7.03	7.03	7.11	0.15	20.33	19.82	20.18	2.53	1.86	1.47	1.35	1.38	1.43

1. Total Loss = Insertion Loss + 6 dB splitter loss.



NOTES

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the standard terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/terms/viewterm.html

