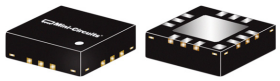
MMIC Surface Mount

Power Splitter/Combiner

WP4W+

4 Way-0° 50Ω 3300 to 3800 MHz



CASE STYLE: DQ1225

+RoHS Compliant
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Available Tape and Reel at no extra cost

Reel Size	Devices/Reel
7"	20, 50, 100, 200, 500, 1000, 2000

Maximum Ratings

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

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

Pad Connections

SUM PORT	2
PORT 1	12
PORT 2	10
PORT 3	6
PORT 4	4
GROUND	1,3,5,7,8,9,11, paddle

Product Marking

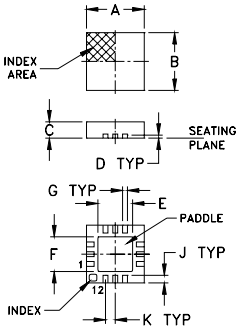
Features

- excellent isolation, 26 dB typ.
- good phase unbalance, 2 deg. typ.
- good amplitude unbalance, 0.15 dB typ.
- small size, .118" x .118" x .035"
- high ESD level
- aqueous washable

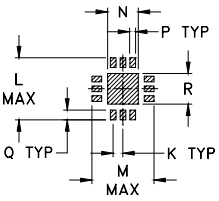
Applications

- WIMAX

Outline Drawing



PCB Land Pattern



Suggested Layout,
Tolerance to be within ±.002

Outline Dimensions (inch / mm)

A	B	C	D	E	F	G	H	J
.118	.118	.035	.008	.057	.057	.009	---	.016
3.00	3.00	0.89	0.20	1.45	1.45	0.23	---	0.41

K	L	M	N	P	Q	R	wt
.020	.127	.127	.049	.010	.020	.049	grams
0.51	3.23	3.23	1.24	0.25	0.51	1.24	0.02

Demo Board MCL P/N: TB-395+
Suggested PCB Layout (PL-259)

Electrical Specifications

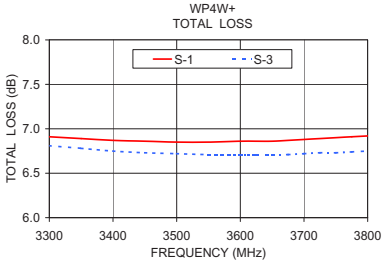
FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS* (dB) ABOVE 6.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)	VSWR (:1) Typ.	
f_L-f_U	Typ.	Min.	Typ.	Max.	Max.	Max.	Port S	Ports 1,2,3,4
3300-3800	26	18	0.8	1.4	8	0.4	1.5	1.3

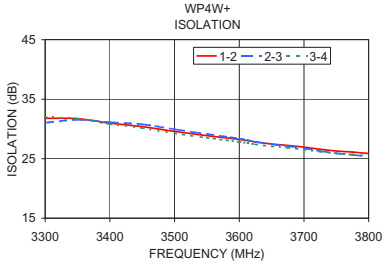
*Includes test fixture loss, 0.27 dB typ.

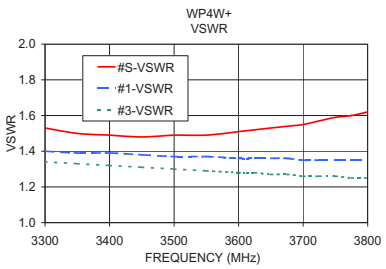
Typical Performance Data

Freq. (MHz)	Total Loss[1] (dB)				Amp. Unbal. (dB)	Isolation (dB)			Phase Unbal. (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						
3300.00	6.91	6.88	6.81	6.88	0.10	31.79	31.04	31.98	0.99	1.53	1.40	1.32	1.34	1.41
3350.00	6.89	6.85	6.78	6.86	0.11	31.72	31.54	31.75	1.00	1.50	1.39	1.31	1.33	1.40
3400.00	6.87	6.82	6.75	6.84	0.12	30.97	31.12	30.82	1.02	1.49	1.39	1.30	1.32	1.40
3450.00	6.86	6.80	6.73	6.83	0.13	30.39	30.78	30.15	1.19	1.48	1.38	1.29	1.31	1.39
3500.00	6.85	6.79	6.72	6.83	0.13	29.59	29.95	29.26	1.36	1.49	1.37	1.28	1.30	1.38
3550.00	6.85	6.77	6.71	6.83	0.14	28.87	29.14	28.52	1.57	1.49	1.37	1.27	1.29	1.38
3600.00	6.86	6.77	6.71	6.83	0.15	28.23	28.36	27.83	1.74	1.51	1.36	1.26	1.28	1.38
3625.00	6.86	6.77	6.71	6.84	0.15	27.81	27.84	27.41	1.83	1.52	1.36	1.26	1.28	1.37
3650.00	6.86	6.77	6.71	6.84	0.16	27.47	27.42	27.07	1.94	1.53	1.36	1.25	1.27	1.37
3675.00	6.87	6.77	6.71	6.85	0.16	27.23	27.11	26.84	2.02	1.54	1.36	1.25	1.27	1.37
3700.00	6.88	6.78	6.72	6.86	0.16	26.94	26.74	26.53	2.09	1.55	1.35	1.24	1.26	1.37
3725.00	6.89	6.78	6.73	6.87	0.16	26.59	26.29	26.18	2.18	1.57	1.35	1.24	1.26	1.37
3750.00	6.90	6.79	6.73	6.87	0.17	26.29	25.90	25.89	2.28	1.59	1.35	1.24	1.26	1.36
3775.00	6.91	6.79	6.74	6.88	0.17	26.11	25.65	25.71	2.39	1.60	1.35	1.23	1.25	1.36
3800.00	6.92	6.80	6.75	6.89	0.17	25.87	25.35	25.47	2.47	1.62	1.35	1.23	1.25	1.36

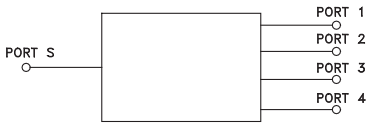
1. Total Loss = Insertion Loss + 6dB splitter loss.







electrical schematic



ESD Rating
Human Body Model (HBM): Class 1A (250 to < 500v) in accordance with ANSI/ESD STM 5.1 - 2001
Machine Model (MM): Class M2 (100V to < 250V) in accordance with ANSI/ESD STM 5.2 - 1999

Notes
A. 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.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
C. 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/MCLStore/terms.jsp