

Surface Mount Power Splitter/Combiner

HPQ-15+ HPQ-15

2 Way-90° 50Ω 1320 to 1430 MHz



Maximum Ratings

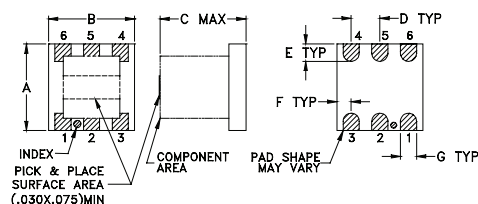
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.

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

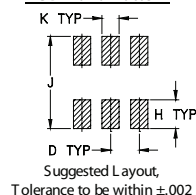
Pin Connections

SUM PORT	3
PORT 1 (0°)	6
PORT 2 (+90°)	4
GROUND	2,5
50 OHM TERM EXTERNAL	1

Outline Drawing



PCB Land Pattern

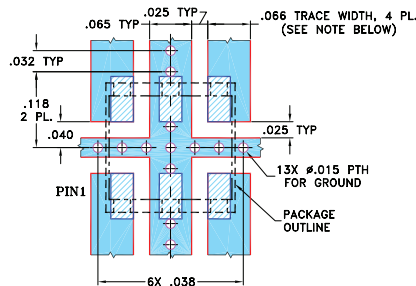


Outline Dimensions (inch/mm)

A	B	C	D	E	F
.200	.200	.200	.075	.050	.025
5.08	5.08	5.08	1.91	1.27	0.64

G	H	J	K	wt
.026	.070	.220	.035	grams
0.66	1.78	5.59	0.89	0.15

Demo Board MCL P/N: TB-43 Suggested PCB Layout (PL-114)



- NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS R04350B WITH DIELECTRIC THICKNESS .030" ± .002"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
 - DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

- low insertion loss, 0.3 dB typ.
- aqueous washable

Applications

- GPS
- modulators
- balanced amplifiers

CASE STYLE: AT577

PRICE: Contact Sales Dept.

+RoHS Compliant

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

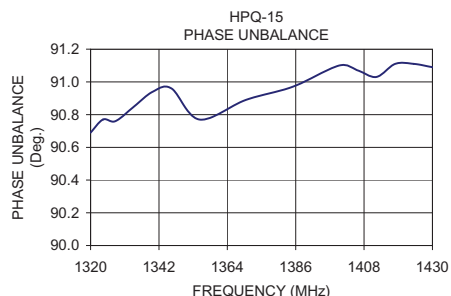
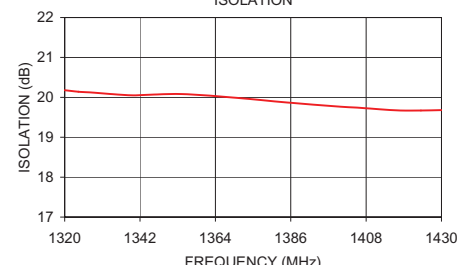
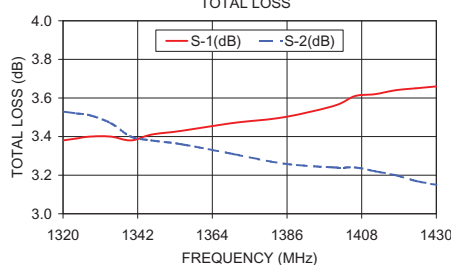
Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) Avg. of Coupled Outputs ABOVE 3 dB		PHASE UNBALANCE (Degrees)		AMPLITUDE UNBALANCE (dB)		VSWR (:1)	
	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	S-Port Typ.	Output Typ.
f _L -f _H										
1320-1430	19	15	0.3	0.5	1.8	5.0	0.35	1.2	1.22	1.22

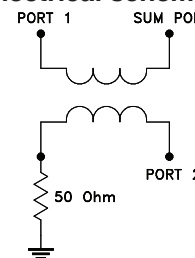
Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
1320.00	3.38	3.53	0.15	20.18	90.69	1.34	1.29	1.30
1324.00	3.39	3.52	0.13	20.14	90.77	1.35	1.29	1.30
1328.00	3.40	3.51	0.11	20.12	90.76	1.35	1.29	1.30
1334.00	3.40	3.47	0.08	20.08	90.85	1.35	1.29	1.31
1340.00	3.38	3.40	0.02	20.05	90.94	1.35	1.30	1.31
1346.00	3.41	3.38	0.03	20.07	90.96	1.35	1.30	1.31
1355.00	3.43	3.36	0.07	20.08	90.77	1.36	1.30	1.31
1370.00	3.47	3.31	0.15	19.99	90.89	1.36	1.31	1.32
1385.00	3.50	3.26	0.24	19.87	90.97	1.37	1.31	1.33
1400.00	3.56	3.24	0.32	19.77	91.10	1.37	1.32	1.33
1406.00	3.61	3.24	0.36	19.74	91.07	1.38	1.32	1.34
1412.00	3.62	3.22	0.41	19.70	91.03	1.38	1.32	1.34
1418.00	3.64	3.20	0.44	19.67	91.11	1.38	1.32	1.34
1424.00	3.65	3.17	0.47	19.67	91.11	1.38	1.32	1.34
1430.00	3.66	3.15	0.51	19.68	91.09	1.39	1.33	1.35

1. Total Loss = Insertion Loss + 3dB splitter loss.



electrical schematic



For detailed performance specs & shopping online see web site



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Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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.

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