

Surface Mount Power Splitter/Combiner

HPQ-10W+ HPQ-10W

2 Way-90° 50Ω 880 to 1030 MHz



Maximum Ratings

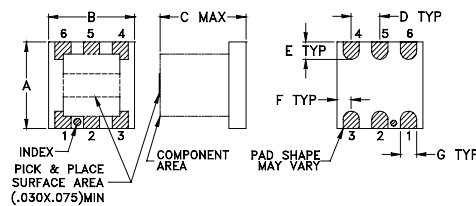
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.

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

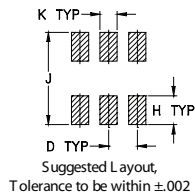
Pin Connections

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

Outline Drawing



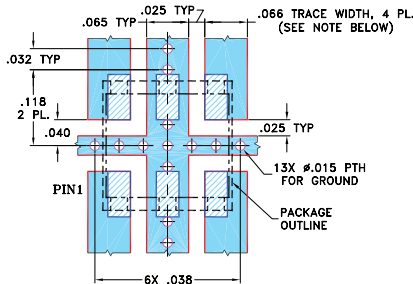
PCB Land Pattern



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, 0.28 dB typ.
- good isolation, 22 dB typ.
- excellent input & output VSWR, 1.25:1 typ.
- aqueous washable

Applications

- cellular
- modulator
- 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

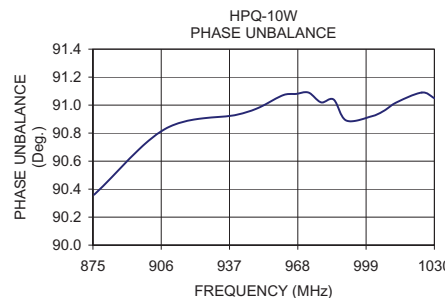
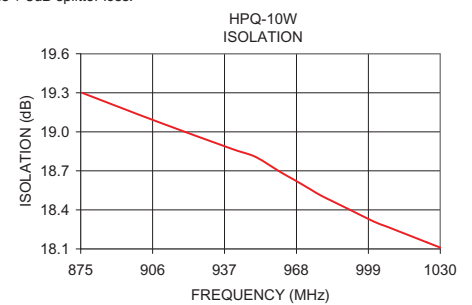
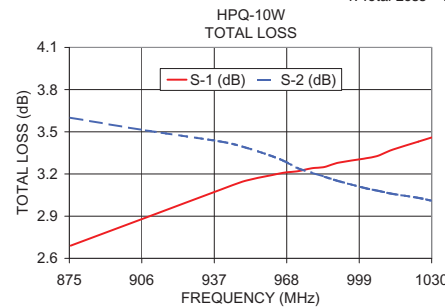
Electrical Specifications

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 _U										
880-1030	22	16	0.28	0.50	1.0	4.0	0.85	1.6	1.17	1.17

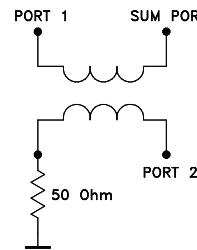
Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
875.55	2.69	3.60	0.91	19.30	90.36	1.22	1.24	1.25
907.77	2.89	3.51	0.62	19.08	90.83	1.23	1.25	1.26
940.00	3.09	3.43	0.34	18.87	90.93	1.24	1.27	1.27
950.00	3.15	3.39	0.24	18.81	90.98	1.24	1.27	1.27
961.14	3.19	3.33	0.14	18.69	91.07	1.24	1.27	1.27
967.14	3.21	3.29	0.09	18.63	91.08	1.25	1.28	1.27
972.85	3.22	3.24	0.03	18.57	91.09	1.25	1.28	1.27
978.57	3.24	3.21	0.03	18.51	91.02	1.25	1.28	1.28
984.28	3.25	3.18	0.08	18.46	91.04	1.25	1.29	1.28
990.00	3.28	3.15	0.13	18.41	90.89	1.26	1.29	1.28
1001.42	3.31	3.10	0.21	18.31	90.92	1.26	1.29	1.28
1007.14	3.33	3.08	0.25	18.27	90.96	1.26	1.30	1.28
1012.85	3.37	3.06	0.30	18.23	91.02	1.27	1.30	1.29
1024.28	3.43	3.03	0.39	18.15	91.09	1.27	1.31	1.29
1030.00	3.46	3.01	0.45	18.11	91.05	1.27	1.31	1.29

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



electrical schematic



For detailed performance specs & shopping online see web site

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