

Surface Mount Power Splitter/Combiner

HPQ-12+ HPQ-12

2 Way-90° 50Ω 990 to 1100 MHz



CASE STYLE: AT577
PRICE: Contact Sales Dept.

Maximum Ratings

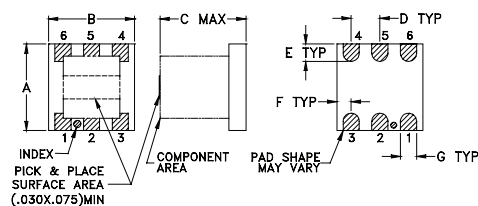
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.

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

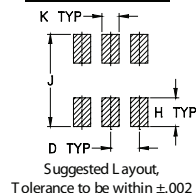
Pin Connections

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

Outline Drawing



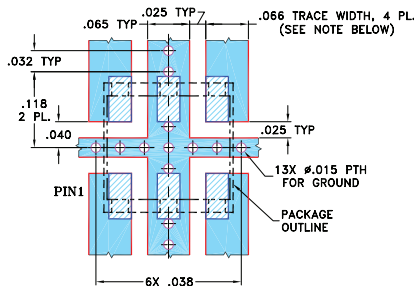
PCB Land Pattern



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, 0.25 dB typ.
- excellent input & output VSWR, 1.2:1 typ.
- aqueous washable

Applications

- cellular
- modulators
- balanced amplifiers

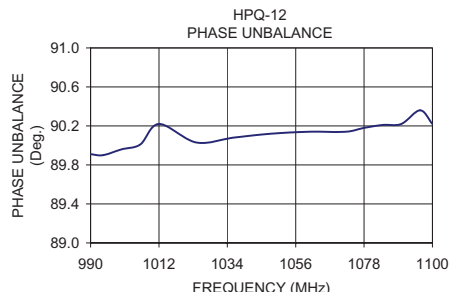
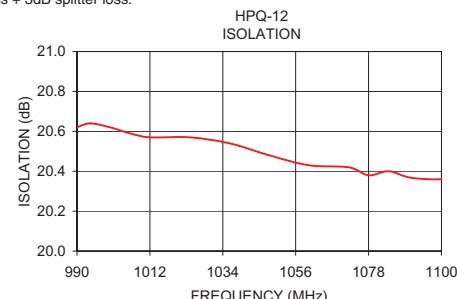
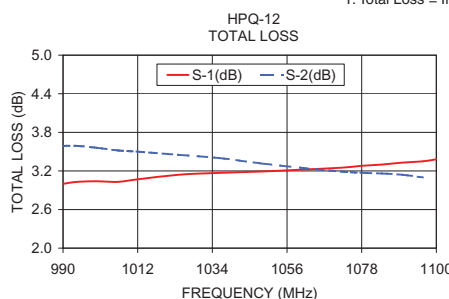
Electrical Specifications

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										
990-1100	21	16	0.25	0.45	0.8	4.0	0.5	1.2	1.2	1.2

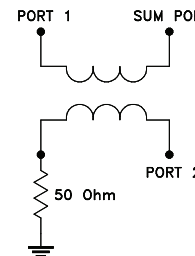
Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
990.00	3.00	3.59	0.59	20.62	89.91	1.22	1.23	1.25
994.00	3.03	3.59	0.56	20.64	89.90	1.22	1.23	1.25
1000.00	3.04	3.56	0.52	20.62	89.96	1.22	1.23	1.26
1006.00	3.03	3.52	0.48	20.59	90.01	1.22	1.23	1.26
1012.00	3.07	3.50	0.42	20.57	90.22	1.22	1.23	1.26
1024.00	3.14	3.45	0.32	20.57	90.03	1.23	1.24	1.26
1036.00	3.17	3.40	0.23	20.54	90.08	1.23	1.24	1.27
1048.00	3.19	3.32	0.13	20.48	90.12	1.24	1.25	1.27
1060.00	3.22	3.25	0.03	20.43	90.14	1.24	1.25	1.28
1072.00	3.25	3.19	0.06	20.42	90.14	1.24	1.25	1.28
1078.00	3.28	3.17	0.11	20.38	90.18	1.25	1.26	1.29
1084.00	3.30	3.16	0.14	20.40	90.21	1.25	1.26	1.29
1090.00	3.33	3.14	0.20	20.37	90.22	1.25	1.26	1.29
1096.00	3.35	3.10	0.26	20.36	90.36	1.25	1.26	1.29
1100.00	3.38	3.09	0.28	20.36	90.22	1.25	1.26	1.30

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



electrical schematic



For detailed performance specs & shopping online see web site

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