

Surface Mount Power Splitter/Combiner

HPQ-12W+ HPQ-12W

2 Way-90° 50Ω 940 to 1130 MHz



Maximum Ratings

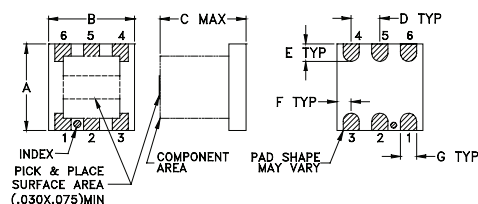
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.

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

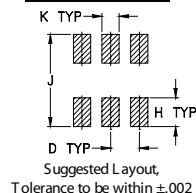
Pin Connections

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

Outline Drawing



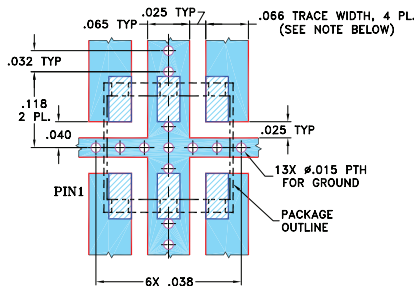
PCB Land Pattern



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

Applications

- cellular
- 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

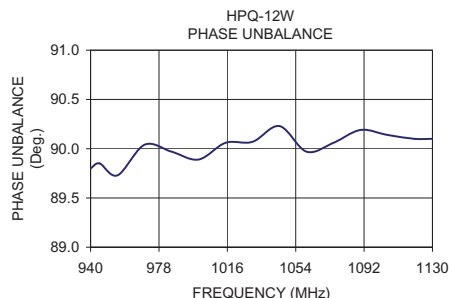
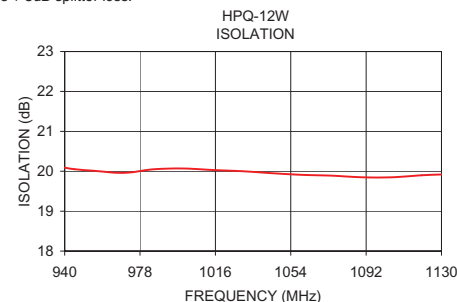
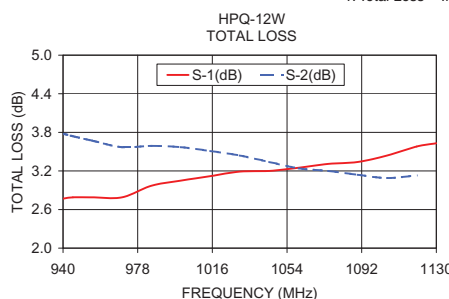
Electrical Specifications

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	21	16	0.3	0.5	1.0	4.0	0.8	1.6	1.2	1.2

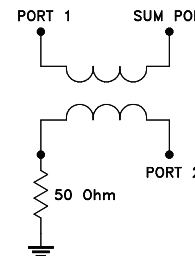
Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
940.00	2.77	3.78	1.01	20.09	89.80	1.20	1.21	1.22
945.00	2.79	3.74	0.95	20.05	89.85	1.20	1.21	1.22
955.00	2.79	3.67	0.89	20.01	89.73	1.20	1.21	1.23
970.00	2.79	3.57	0.78	19.96	90.04	1.21	1.22	1.23
985.00	2.97	3.59	0.61	20.05	89.97	1.21	1.22	1.24
1000.00	3.05	3.57	0.52	20.07	89.89	1.22	1.23	1.24
1015.00	3.12	3.51	0.39	20.03	90.06	1.22	1.23	1.25
1030.00	3.19	3.44	0.25	20.00	90.07	1.23	1.24	1.26
1045.00	3.20	3.34	0.14	19.95	90.23	1.23	1.24	1.26
1060.00	3.25	3.24	0.01	19.91	89.97	1.24	1.25	1.27
1075.00	3.31	3.20	0.10	19.89	90.06	1.24	1.25	1.27
1090.00	3.34	3.14	0.20	19.85	90.19	1.25	1.26	1.28
1105.00	3.44	3.09	0.35	19.85	90.14	1.25	1.26	1.28
1120.00	3.58	3.13	0.45	19.90	90.10	1.26	1.26	1.29
1130.00	3.63	3.13	0.50	19.92	90.10	1.26	1.27	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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