

Surface Mount Power Splitter/Combiner

HPQ-06+ HPQ-06

2 Way-90° 50Ω 510 to 570 MHz



CASE STYLE: AT577
PRICE: \$6.95 ea. QTY (10-49)

Maximum Ratings

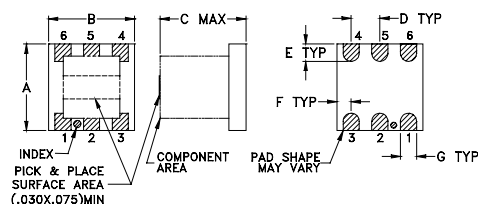
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.

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

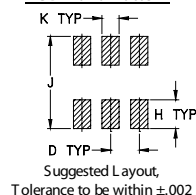
Pin Connections

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

Outline Drawing



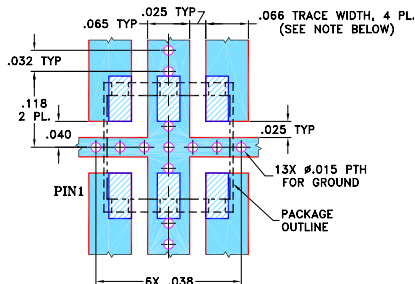
PCB Land Pattern



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 RO4350B 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, 0.2 dB typ.
- good isolation, 26 dB typ.
- excellent input VSWR, 1.1:1 typ.; output VSWR, 1.12 typ.
- aqueous washable

Applications

- UHF
- image reject mixers
- balanced amplifiers
- modulators

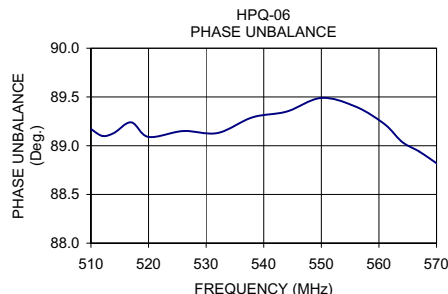
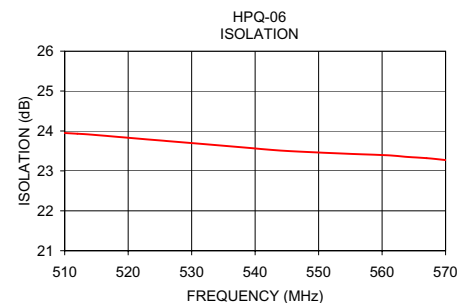
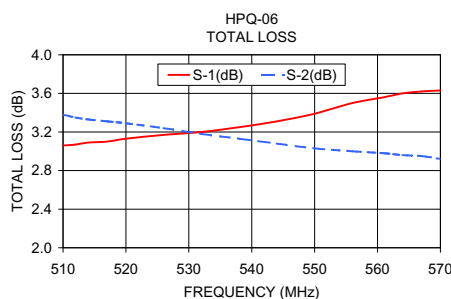
Electrical Specifications

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	26	18	0.2	0.4	0.6	3.0	0.5	1.2	1.10	1.12

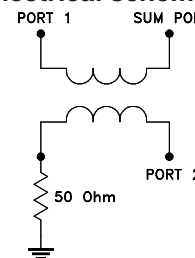
Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
510.00	3.06	3.38	0.32	23.95	89.17	1.14	1.12	1.12
512.00	3.07	3.35	0.28	23.93	89.10	1.14	1.12	1.12
514.00	3.09	3.33	0.24	23.91	89.13	1.14	1.12	1.12
517.00	3.10	3.31	0.21	23.87	89.24	1.14	1.13	1.12
520.00	3.13	3.29	0.16	23.83	89.09	1.14	1.13	1.12
526.00	3.17	3.24	0.06	23.75	89.15	1.14	1.13	1.13
532.00	3.20	3.18	0.02	23.67	89.13	1.15	1.13	1.13
538.00	3.25	3.13	0.12	23.59	89.29	1.15	1.13	1.13
544.00	3.31	3.08	0.23	23.51	89.35	1.15	1.13	1.13
550.00	3.39	3.03	0.36	23.46	89.49	1.15	1.13	1.13
556.00	3.50	3.00	0.49	23.42	89.40	1.15	1.14	1.14
561.00	3.56	2.98	0.58	23.39	89.22	1.16	1.14	1.14
564.00	3.60	2.96	0.64	23.35	89.04	1.16	1.14	1.14
567.00	3.62	2.95	0.67	23.32	88.94	1.16	1.14	1.14
570.00	3.63	2.92	0.71	23.27	88.82	1.16	1.14	1.14

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



electrical schematic



For detailed performance specs & shopping online see web site

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