

Surface Mount Power Splitter/Combiner

HPQ-09+ HPQ-09

2 Way-90° 50Ω 730 to 800 MHz



Maximum Ratings

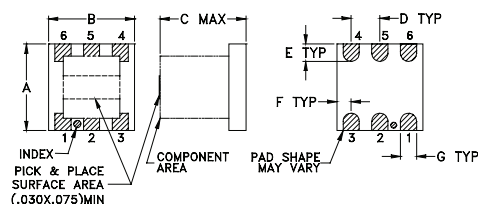
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.

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

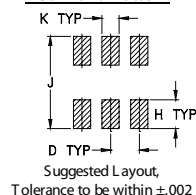
Pin Connections

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

Outline Drawing



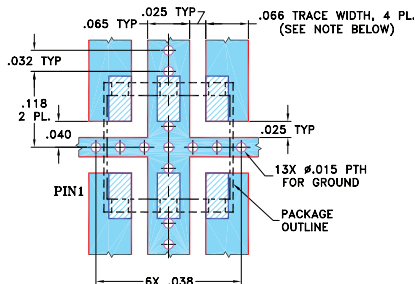
PCB Land Pattern



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 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, 25 dB typ.
- excellent input VSWR, 1.2:1 typ.; output VSWR, 1.1:1 typ.
- aqueous washable

Applications

- VHF
- balanced amplifiers
- modulators

CASE STYLE: AT577
PRICE: Contact Sales Dept.

+RoHS Compliant

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

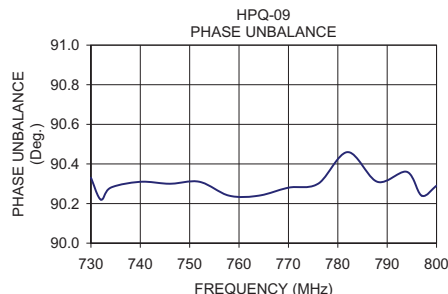
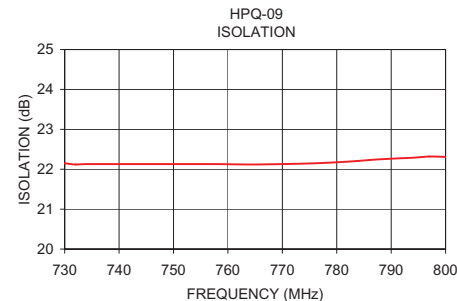
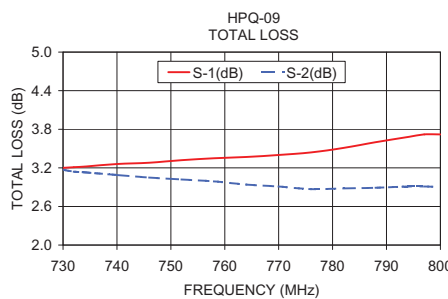
Electrical Specifications

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	25	20	0.2	0.4	0.6 3.0	0.6	1.2	1.14	1.14

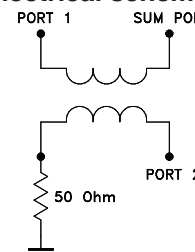
Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
730.00	3.20	3.17	0.04	22.15	90.33	1.19	1.14	1.06
732.00	3.21	3.14	0.06	22.12	90.22	1.19	1.14	1.06
734.00	3.22	3.13	0.08	22.13	90.28	1.19	1.14	1.06
740.00	3.26	3.09	0.18	22.13	90.31	1.19	1.15	1.06
746.00	3.28	3.05	0.23	22.13	90.30	1.20	1.15	1.06
752.00	3.32	3.02	0.31	22.13	90.31	1.20	1.16	1.05
758.00	3.35	2.99	0.36	22.13	90.24	1.20	1.16	1.05
764.00	3.37	2.94	0.43	22.12	90.24	1.20	1.17	1.05
770.00	3.40	2.91	0.49	22.13	90.28	1.20	1.18	1.05
776.00	3.44	2.87	0.57	22.15	90.30	1.21	1.19	1.06
782.00	3.51	2.88	0.63	22.19	90.46	1.21	1.20	1.07
788.00	3.60	2.89	0.71	22.25	90.31	1.21	1.20	1.08
794.00	3.68	2.91	0.77	22.29	90.36	1.21	1.20	1.10
797.00	3.72	2.91	0.81	22.32	90.24	1.21	1.20	1.10
800.00	3.72	2.90	0.82	22.31	90.29	1.21	1.19	1.11

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



electrical schematic



For detailed performance specs & shopping online see web site

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