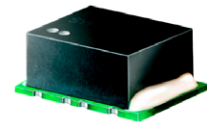


Surface Mount Power Splitter/Combiner

SYPQ-70

2 Way-90° 50Ω

65 to 75 MHz



CASE STYLE: AH202
PRICE: \$13.95 ea. QTY (1-9)

Maximum Ratings

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

Pin Connections

SUM PORT	1
PORT 1 (0°)	5
PORT 2 (+90)	8
GROUND	2,3,6,7
50 OHM TERM. EXTERNAL	4

Features

- low insertion loss, 0.1 dB typ.
- high isolation, 31 dB typ.
- good amplitude balance, 1.1 dB max.
- excellent VSWR, 1.06:1 typ

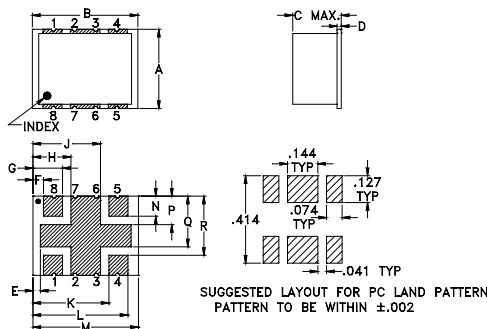
Applications

- VHF
- balanced amplifiers
- I & Q modulators

Splitter Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)	INSERTION LOSS (dB) Avg. of Coupled Outputs less 3 dB	PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
f_L - f_U	Typ. Min.	Typ. Max.	Max.	Max.
65-75	31 24	0.1 0.4	3	1.1

Outline Drawing



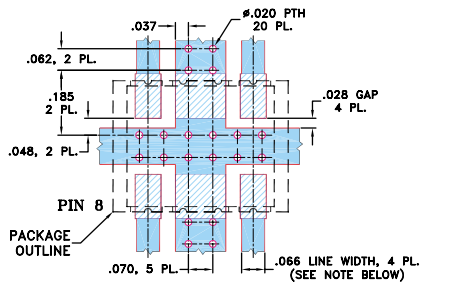
Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	
.375	.500	.25	.020	0.35	.050	.140	.180	
9.53	12.70	6.35	0.51	8.89	1.27	3.56	4.57	
J	K	L	M	N	P	Q	R	wt
.320	.360	.450	.320	.360	.135	.240	.280	grams
8.13	9.14	11.43	8.13	9.14	3.43	6.10	7.11	0.80

Typical Performance Data

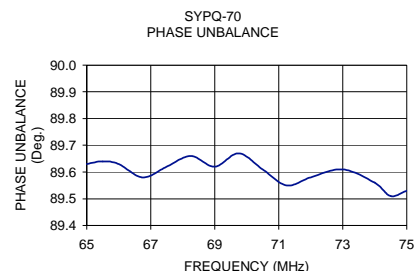
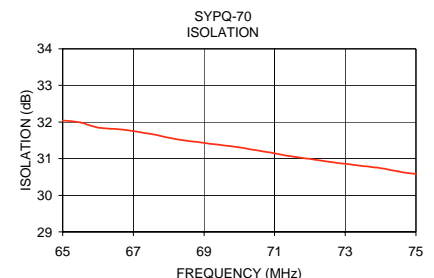
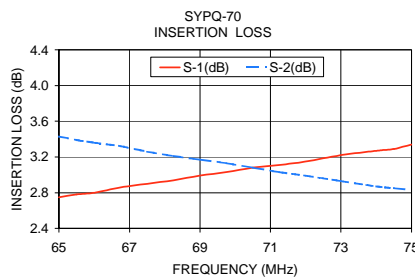
Frequency (MHz)	Insertion Loss (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
65.00	2.75	3.43	0.68	32.04	89.63	1.04	1.03	1.05
65.50	2.78	3.39	0.61	31.99	89.64	1.04	1.03	1.05
66.00	2.80	3.36	0.56	31.85	89.63	1.04	1.03	1.05
66.75	2.86	3.32	0.46	31.79	89.58	1.04	1.03	1.05
67.50	2.90	3.26	0.36	31.67	89.62	1.04	1.03	1.05
68.25	2.94	3.21	0.27	31.53	89.66	1.04	1.03	1.05
69.00	2.99	3.17	0.19	31.43	89.62	1.04	1.03	1.06
69.75	3.03	3.13	0.10	31.34	89.67	1.04	1.03	1.06
70.50	3.08	3.08	0.00	31.23	89.61	1.04	1.03	1.06
71.25	3.11	3.03	0.08	31.10	89.55	1.04	1.03	1.06
72.00	3.15	2.99	0.16	30.99	89.58	1.04	1.04	1.06
73.00	3.22	2.93	0.29	30.86	89.61	1.04	1.04	1.06
74.00	3.27	2.87	0.40	30.74	89.56	1.04	1.04	1.06
74.50	3.29	2.85	0.45	30.65	89.51	1.04	1.04	1.06
75.00	3.34	2.83	0.51	30.58	89.53	1.04	1.04	1.06

Demo Board MCL P/N: TB-265 Suggested PCB Layout (PL-138)



1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350 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
- DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK



electrical schematic

