

Power Splitter/Combiner

5 Way-0° 50Ω

2 to 200 MHz

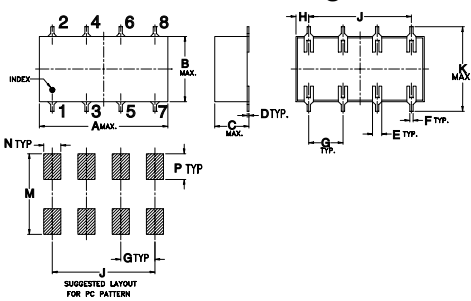
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.625W max.

Pin Connections

SUM PORT	1
PORT 1	6
PORT 2	8
PORT 3	7
PORT 4	5
PORT 5	3
GROUND	2.4

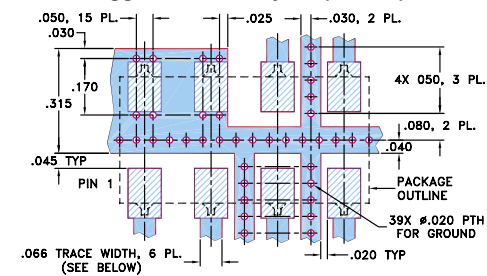
Outline Drawing



Outline Dimensions (inch/mm)


A	B	C	D	E	F	G
0.75	0.38	0.28	0.01	0.05	0.02	0.2
19.05	9.65	7.11	0.25	1.27	0.51	5.08
H	J	K	M	N	P	wt
0.075	0.6	0.45	0.47	0.1	0.15	grams
1.91	15.24	11.43	11.94	2.54	3.81	1.60


Demo Board MCL P/N: TB-213
Suggested PCB Layout (PL-104)



NOTE: 1. TRACE WIDTH IS SHOWN FOR ROGERS R04350 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 SOLDER MASK

Features

- low insertion loss, 0.3 dB typ.
- high isolation 29 dB typ.
- excellent amplitude unbalance, 0.3 dB typ.

Applications

- VHF
- instrumentation
- receivers/transmitters



CASE STYLE: YY161
PRICE: \$21.95 ea. QTY (1-9)

+ RoHS compliant in accordance
with EU Directive (2002/95/EC)

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

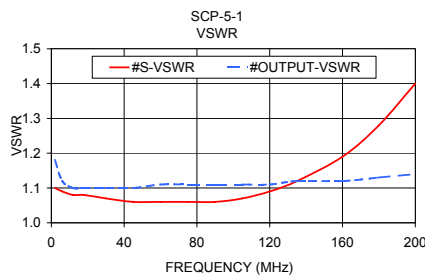
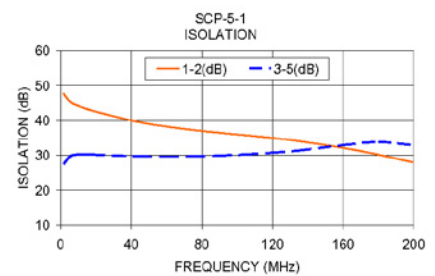
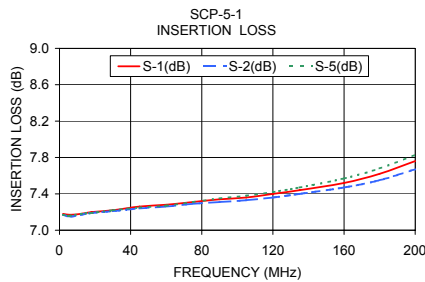
Splitter Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 7.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L	M	U	L	M	U
	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
f _l -f _u																		
2-200	30	20	29	20	30	20	0.2	0.5	0.3	0.75	0.6	1.5	1	3	5	0.2	0.3	0.6

L = low range [f_L to $10 f_L$] M = mid range [$10 f_L$ to $f_U/2$] U = upper range [$f_U/2$ to f_U]

Typical Performance Data

Freq. (MHz)	Insertion Loss (dB)					Amp. Unbal. (dB)	Isolation (dB)				Phase Unbal. (deg.)	VSWR S	VSWR OUTPUTS
	S-1	S-2	S-3	S-4	S-5		1-2	2-3	2-4	3-5			
2.00	7.18	7.17	7.17	7.17	7.17	0.01	47.70	45.82	27.74	27.47	0.04	1.10	1.18
6.00	7.17	7.15	7.16	7.16	7.16	0.02	45.13	44.43	30.00	29.83	0.09	1.09	1.12
12.00	7.18	7.17	7.18	7.17	7.18	0.01	43.80	43.17	30.31	30.22	0.19	1.08	1.10
18.00	7.20	7.19	7.19	7.19	7.19	0.01	42.81	42.17	30.23	30.17	0.27	1.08	1.10
30.00	7.22	7.21	7.21	7.21	7.22	0.01	41.21	40.49	29.90	29.95	0.46	1.07	1.10
45.00	7.26	7.24	7.23	7.24	7.25	0.02	39.48	38.73	29.59	29.68	0.60	1.06	1.10
60.00	7.28	7.26	7.26	7.26	7.27	0.02	38.25	37.46	29.48	29.63	0.88	1.06	1.11
75.00	7.31	7.29	7.28	7.30	7.31	0.03	37.24	36.46	29.46	29.68	1.03	1.06	1.11
90.00	7.34	7.31	7.31	7.32	7.35	0.04	36.45	35.56	29.57	29.88	1.23	1.06	1.11
105.00	7.36	7.33	7.33	7.34	7.38	0.05	35.72	34.77	29.72	30.22	1.45	1.07	1.11
120.00	7.40	7.36	7.37	7.37	7.42	0.05	34.94	33.93	30.03	30.72	1.58	1.09	1.11
135.00	7.44	7.40	7.40	7.41	7.47	0.07	34.07	32.98	30.42	31.40	1.76	1.12	1.12
160.00	7.52	7.47	7.46	7.48	7.57	0.11	32.14	31.04	31.11	32.92	2.04	1.19	1.12
180.00	7.62	7.55	7.55	7.58	7.68	0.13	30.17	29.10	31.10	33.81	2.35	1.28	1.13
200.00	7.76	7.67	7.67	7.70	7.83	0.16	27.91	26.91	29.96	32.90	2.63	1.40	1.14



electrical schematic



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