

Surface Mount

Power Splitter/Combiner

SCP-4-4-75+ SCP-4-4-75

4 Way-0° 75Ω

10 to 1000 MHz



CASE STYLE: YY161
PRICE: \$28.95 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.
Internal Dissipation	0.375W max.

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

Pin Connections

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

Features

- wideband, 10 to 1000 MHz
- high isolation, 32 dB typ
- excellent amplitude unbalance, 0.4 dB typ.

Applications

- cellular
- CATV
- receivers/transmitters

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

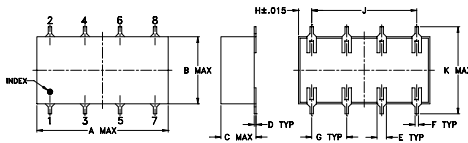
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Electrical Specifications

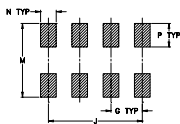
FREQ. RANGE (MHz)	ISOLATION (dB)			INSERTION LOSS (dB) ABOVE 6 dB			PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)								
	L	M	U	L	M	U	L	M	U	L	M	U						
f_L - f_U	Typ. Min.	Typ. Min.	Typ. Min.	Typ. Max.	Typ. Max.	Typ. Max.	Max.	Max.	Max.	Max.	Max.	Max.						
10-1000	36	20	32	18	24	14	0.5	1.0	0.65	1.3	0.8	2.0	3	6	12	0.2	0.4	0.9

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]

Outline Drawing



PCB Land Pattern



Suggested Layout, Tolerance to be within ±0.02

Outline Dimensions (inch/mm)

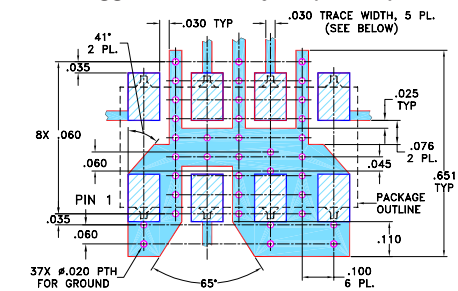
A	B	C	D	E	F	G
0.75	0.38	0.28	0.01	0.05	0.02	0.2
19.05	9.65	7.11	0.25	1.27	0.51	5.08

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

Typical Performance Data

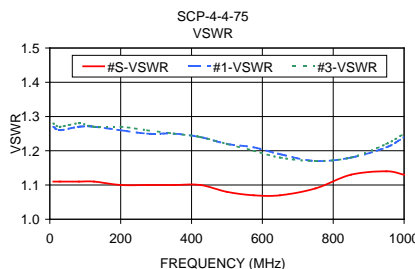
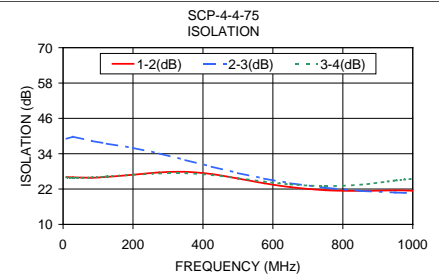
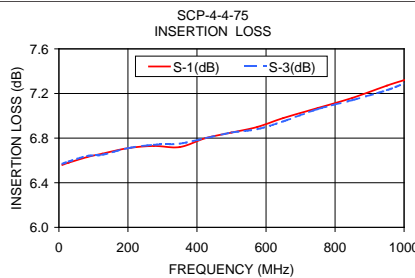
Freq. (MHz)	Insertion Loss (dB)				Amp. Unbal. (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 2	VSWR 3	VSWR 4
	S-1	S-2	S-3	S-4		1-2	2-3	3-4						
10.00	6.56	6.48	6.57	6.50	0.09	26.09	39.05	25.95	0.09	1.11	1.27	1.27	1.28	1.28
28.00	6.58	6.51	6.59	6.53	0.08	25.99	39.79	25.80	0.07	1.11	1.26	1.26	1.27	1.27
82.00	6.63	6.56	6.64	6.58	0.08	25.86	38.34	25.94	0.11	1.11	1.27	1.27	1.28	1.26
125.00	6.66	6.58	6.65	6.58	0.08	26.12	37.42	26.25	0.20	1.11	1.27	1.27	1.27	1.26
200.00	6.71	6.64	6.71	6.63	0.08	26.87	35.99	26.84	0.20	1.10	1.26	1.27	1.27	1.26
275.00	6.73	6.67	6.74	6.63	0.11	27.64	34.09	27.28	0.26	1.10	1.25	1.26	1.26	1.25
350.00	6.72	6.68	6.75	6.65	0.10	27.84	31.86	27.36	0.27	1.10	1.25	1.26	1.25	1.24
425.00	6.80	6.77	6.80	6.68	0.13	27.09	29.59	26.76	0.34	1.10	1.24	1.25	1.24	1.22
500.00	6.85	6.82	6.85	6.71	0.15	25.59	27.43	25.69	0.37	1.08	1.22	1.24	1.22	1.21
575.00	6.90	6.89	6.88	6.73	0.17	23.96	25.56	24.52	0.52	1.07	1.21	1.22	1.20	1.19
650.00	6.98	6.99	6.95	6.78	0.22	22.67	23.98	23.58	0.59	1.07	1.19	1.21	1.18	1.17
750.00	7.07	7.14	7.06	6.85	0.29	21.62	22.43	23.02	0.94	1.09	1.17	1.20	1.17	1.15
850.00	7.16	7.28	7.14	6.89	0.39	21.38	21.37	23.46	1.76	1.13	1.18	1.22	1.18	1.15
950.00	7.27	7.45	7.23	6.92	0.52	21.57	20.80	24.89	2.57	1.14	1.21	1.26	1.22	1.17
1000.00	7.32	7.55	7.29	6.96	0.59	21.44	20.64	25.48	3.07	1.13	1.24	1.29	1.25	1.21

Demo Board MCL P/N: TB-184 Suggested PCB Layout (PL-175)



NOTE: 1. TRACE WIDTH IS SHOWN FOR FR4 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



Electrical Schematic



For detailed performance specs & shopping online see web site

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