

Surface Mount Power Splitter/Combiner

SCPJ-2-9

2 Way-180° 50Ω

200 to 900 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	0.125W max.

Pin Connections

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

Features

- wideband, 200 to 900 MHz
- good isolation, 24 dB typ.
- excellent amplitude unbalance, 0.4 dB typ.

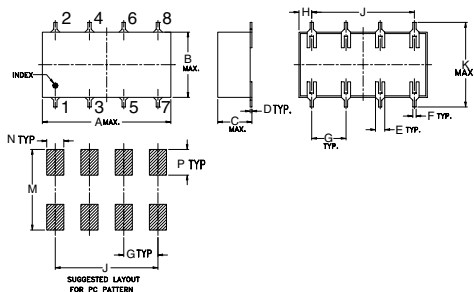
Applications

- VHF/UHF
- cellular
- communication systems

Splitter Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)	INSERTION LOSS (dB) ABOVE 3 dB	PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
f_L - f_U	Typ. Min.	Typ. Max.	Max.	Max.
200-900	24 17	1.0 1.8	6	0.7

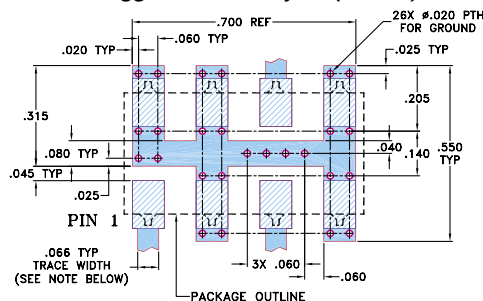
Outline Drawing



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-50 Suggested PCB Layout (PL-060)

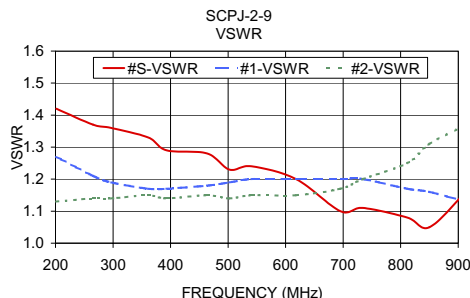
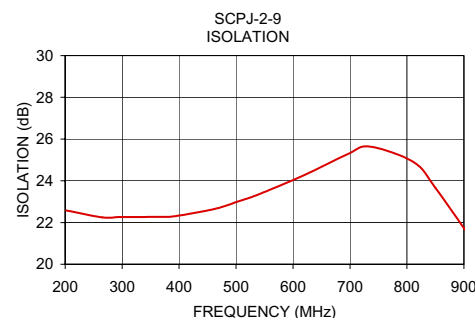
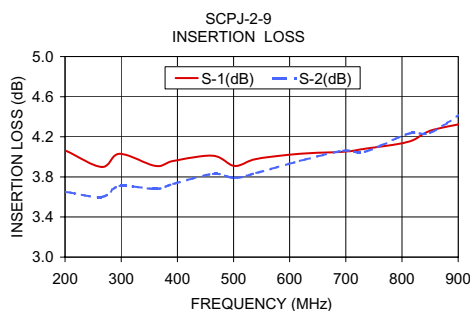


- NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS R04350B WITH DIELECTRIC THICKNESS .030" ± .002". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

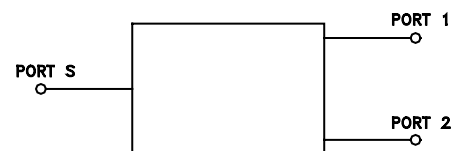
 DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
 DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Typical Performance Data

Frequency (MHz)	Insertion Loss (dB) S-1	Loss (dB) S-2	Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
201.54	4.06	3.65	0.41	22.58	183.33	1.42	1.27	1.13
265.38	3.90	3.60	0.29	22.25	181.67	1.37	1.21	1.14
297.31	4.03	3.71	0.33	22.26	180.97	1.36	1.19	1.14
361.15	3.91	3.68	0.23	22.27	179.90	1.33	1.17	1.15
393.08	3.96	3.73	0.23	22.30	179.67	1.29	1.17	1.14
463.64	4.01	3.83	0.18	22.66	178.81	1.28	1.18	1.15
502.27	3.91	3.79	0.13	23.00	178.58	1.23	1.19	1.14
540.91	3.98	3.84	0.14	23.36	178.37	1.24	1.20	1.15
618.18	4.03	3.96	0.07	24.25	181.90	1.20	1.20	1.15
695.45	4.05	4.06	0.00	25.27	181.65	1.10	1.20	1.17
734.09	4.08	4.05	0.04	25.64	181.51	1.11	1.20	1.20
811.36	4.15	4.23	0.08	24.90	181.15	1.08	1.17	1.25
850.00	4.26	4.24	0.02	23.66	179.95	1.05	1.16	1.31
913.64	4.34	4.46	0.12	21.20	180.00	1.16	1.13	1.37



electrical schematic



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