

Surface Mount Power Splitter/Combiner

SCPQ-150+

2 Way-90° 50Ω 95 to 150 MHz

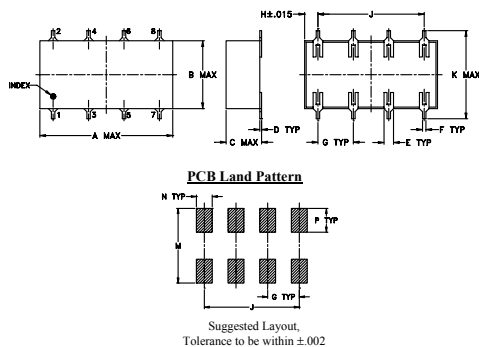
Maximum Ratings

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

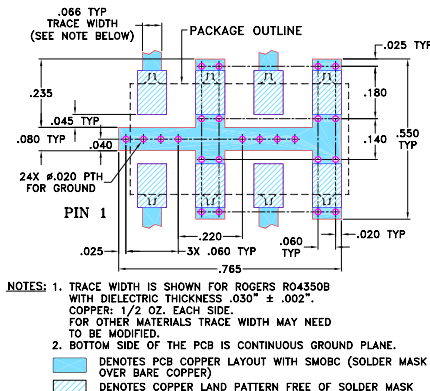
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	M	N	P	wt
.75	.38	.20	.010	.050	.020	.200	.075	.600	.450	.470	.100	.150	grams
19.05	9.65	5.08	0.25	1.27	0.51	5.08	1.91	15.24	11.43	11.94	2.54	3.81	1.6

Demo Board MCL P/N: TB-51 Suggested PCB Layout (PL-062)



Notes

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
 B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
 C. The parts covered by this specification document are subject to Mini-Circuit's standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp

Features

- low insertion loss, 0.3 dB typ.
- good isolation, 22 dB typ.

Applications

- VHF
- modulators
- signal processing
- image rejection mixer



Generic photo used for illustration purposes only

CASE STYLE: YY101

+RoHS Compliant

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

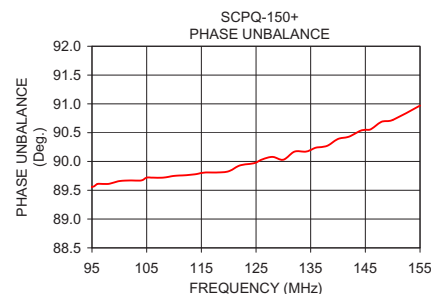
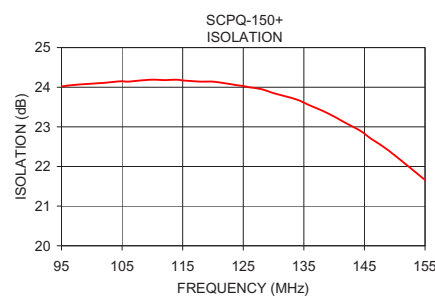
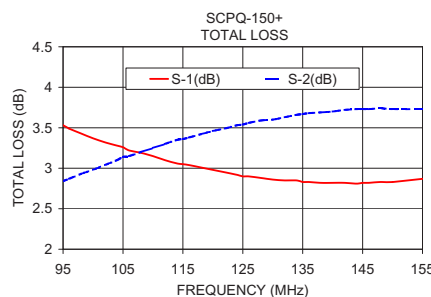
Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)	INSERTION LOSS (dB) Avg. of Coupled Outputs ABOVE 3 dB	PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
f_L - f_U	Typ. Min.	Typ. Max.	Max.	Max.
95-150	22 18	0.3 0.7	3	1.2

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						
95	3.53	2.84	0.69	24.02	89.56	1.13	1.12	1.17
100	3.37	2.98	0.39	24.09	89.66	1.13	1.12	1.17
105	3.26	3.14	0.12	24.15	89.72	1.14	1.12	1.18
110	3.15	3.25	0.11	24.19	89.75	1.14	1.12	1.18
115	3.05	3.36	0.32	24.17	89.80	1.14	1.12	1.19
120	2.98	3.46	0.48	24.14	89.83	1.14	1.12	1.19
125	2.90	3.54	0.64	24.03	89.98	1.14	1.13	1.20
130	2.86	3.60	0.74	23.85	90.03	1.14	1.13	1.21
135	2.83	3.67	0.83	23.61	90.20	1.15	1.13	1.21
138	2.82	3.69	0.87	23.41	90.27	1.15	1.13	1.22
140	2.82	3.70	0.88	23.26	90.39	1.15	1.13	1.22
144	2.81	3.73	0.92	22.93	90.53	1.15	1.14	1.23
146	2.82	3.73	0.91	22.71	90.56	1.16	1.14	1.24
148	2.83	3.74	0.91	22.51	90.69	1.16	1.14	1.24
150	2.83	3.73	0.90	22.28	90.72	1.16	1.14	1.25

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



electrical schematic

