

Ultra-Small Ceramic Power Splitter/Combiner

SCN-3-13+ SCN-3-13

3 Way-0° 50Ω

750 to 1325 MHz

Maximum Ratings

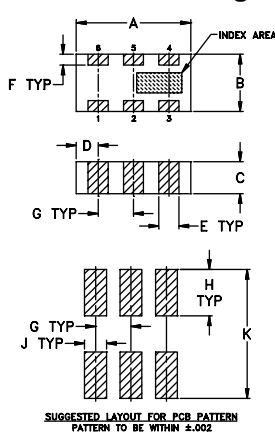
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	15W* max.

*derate linearly to 6W at 100°C ambient.

Pin Connections

SUM PORT	2
PORT 1	6
PORT 2	5
PORT 3	4
GROUND	1,3
PORT 1-2, 2-3	resistor external 124 OHMS
PORT 1-3	resistor external 127 OHMS

Outline Drawing

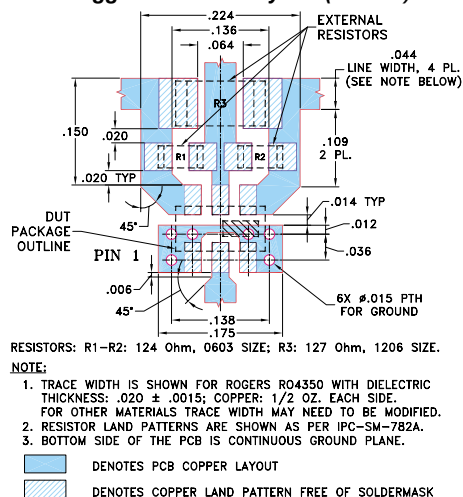


Outline Dimensions (inch)

A	B	C	D	E	F
.126	.063	.037	.024	.022	.012
3.20	1.60	0.94	0.61	0.56	0.30

G	H	J	K	wt
.039	.042	.024	.123	grams
0.99	1.07	0.61	3.12	.020

Demo Board MCL P/N: TB-303 Suggested PCB Layout (PL-171)



Features

- isolation resistors, external
- low insertion loss, 1.0 dB typ.
- excellent amplitude unbalance, 0.3 dB typ.
- very good phase unbalance, 1 deg. typ.
- high isolation, 12 dB typ.
- excellent power handling, 15W as splitter
- small size, 0.12"X0.06"X0.035"
- ESD non-sensitive
- temperature stable LTCC technology
- wrap around, terminations for excellent solderability
- low cost
- patent pending

Applications

- DSS
- WLAN
- satellite communication
- GSM, GPS
- ISM applications
- defense applications



CASE STYLE: FV1206-1
 PRICE: \$3.95 ea. QTY (10-49)
 \$3.25 ea. QTY (100)

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

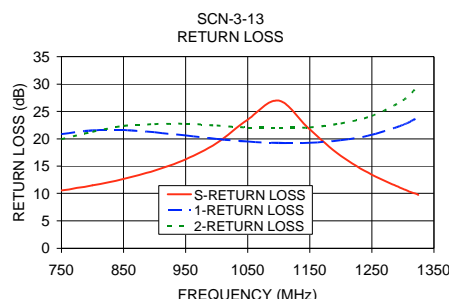
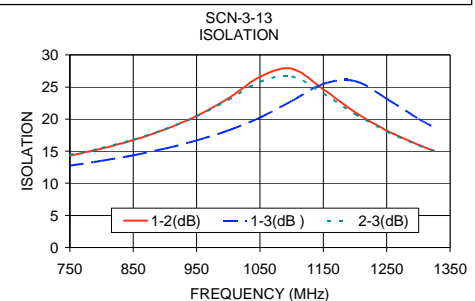
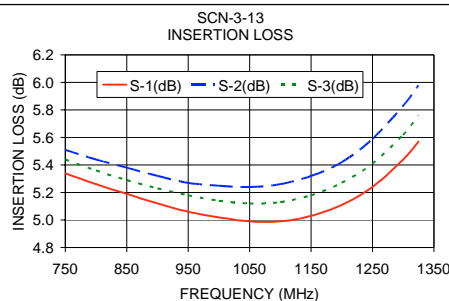
See our web site for RoHS Compliance methodologies and qualifications.

Splitter Electrical Specifications

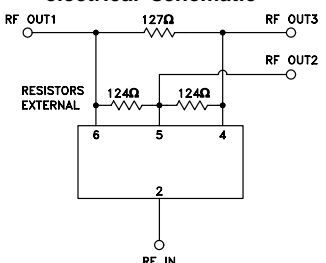
MODEL NO.	FREQUENCY (MHz)	INSERTION LOSS (dB) ABOVE 4.8 dB		ISOLATION (dB)	PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)		RETURNLOSS (dB)	
		Typ.	Max.			Typ.	Min.	Typ.	Max.
SCN-3-13(+)	750-1325 850-1000	1.0	1.5	12	10	1.0	3	12	20
		0.4	0.8	16	12	0.5	3	15	20

Typical Performance Data

Freq. (MHz)	Insertion Loss (dB)			Amp. Unbal. (dB)	Isolation (dB)			Phase Unbal. (deg.)	Return Loss (dB)		
	S-1	S-2	S-3		1-2	1-3	2-3		S	1	2
750.00	5.34	5.51	5.44	0.17	14.30	12.76	14.40	0.91	10.53	20.85	19.89
800.00	5.26	5.44	5.36	0.17	15.41	13.51	15.51	1.02	11.47	21.53	21.25
850.00	5.19	5.38	5.29	0.19	16.74	14.37	16.81	1.07	12.65	21.58	22.33
900.00	5.12	5.32	5.23	0.20	18.39	15.41	18.41	1.20	14.17	21.18	22.67
950.00	5.06	5.27	5.18	0.22	20.49	16.67	20.45	1.30	16.24	20.59	22.75
1000.00	5.02	5.25	5.14	0.23	23.24	18.24	23.00	1.39	19.19	19.97	22.41
1050.00	4.99	5.24	5.12	0.25	26.57	20.24	25.81	1.45	23.51	19.48	22.03
1100.00	4.99	5.26	5.13	0.27	27.86	22.80	26.64	1.54	26.97	19.24	22.00
1150.00	5.03	5.32	5.18	0.29	24.65	25.48	23.98	1.61	21.70	19.28	22.07
1200.00	5.11	5.42	5.27	0.32	21.07	25.93	20.77	1.64	16.90	19.74	22.80
1250.00	5.24	5.59	5.41	0.35	18.22	23.16	18.08	1.73	13.45	20.72	24.18
1300.00	5.44	5.83	5.62	0.39	16.00	20.05	15.93	1.79	10.86	22.51	27.00
1325.00	5.57	5.98	5.76	0.41	15.07	18.71	15.03	1.81	9.77	23.94	29.65



electrical schematic



Mini-Circuits®

Distribution Centers NORTH AMERICA 800-654-7949 • 417-335-5935 • Fax 417-335-5945 • EUROPE 44-1252-832600 • Fax 44-1252-837010

Mini-Circuits ISO 9001 & ISO 14001 Certified

INTERNET <http://www.minicircuits.com>



REV. A
 M98898
 SCN-3-13
 ED-11736/2
 AD/D/J/CP
 060103