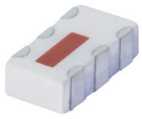
Ultra-Small Ceramic

Power Splitter/Combiner

2 Way-0° 50Ω 2825 to 3700 MHz

SCN-2-35+
SCN-2-35



Generic photo used for illustration purposes only

CASE STYLE: FV1206-1

+RoHS Compliant

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

Available Tape and Reel at no extra cost

Reel Size	Devices/Reel
7"	20, 50, 100, 200, 500,1000, 3000

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	4W* max.

*Derate linearly to 1.3W at 100°C ambient, power input as combiner is limited by rating of external 100Ω Resistor.
Permanent damage may occur if any of these limits are exceeded.

Pin Connections

SUM PORT	2
PORT 1	6
PORT 2	4
GROUND	1,3,5
PORT 1-2	resistor external 100 OHMS

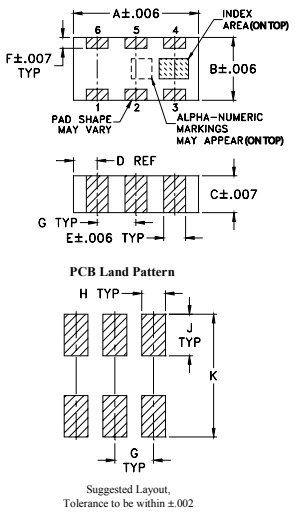
Features

- isolation resistor, external 100 ohms
- low insertion loss, 0.4 dB typ.
- excellent amplitude unbalance, 0.1 dB typ.
- excellent phase unbalance, 0.8 deg. typ.
- high isolation, 28 dB typ.
- excellent power handling, 4W 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
- protected by US patent 6,967,544

Applications

- amateur radio
- defense
- wireless communication

Outline Drawing

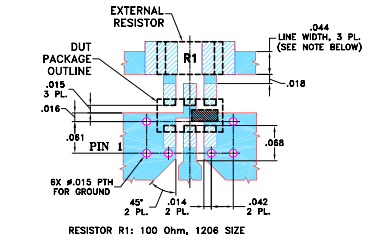


Outline Dimensions (inch / mm)

A	B	C	D	E	F
.126	.063	.035	.024	.022	.011
3.20	1.60	0.89	0.61	0.56	0.28

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

Demo Board MCL P/N: TB-252
Suggested PCB Layout (PL-129)



NOTES: 1.TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS 0.020" ± 0.0015"; 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

Electrical Specifications

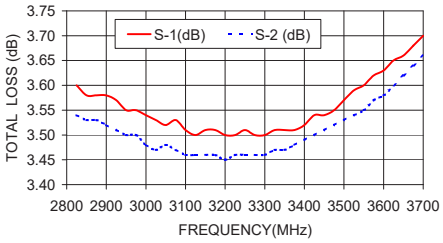
FREQUENCY (MHz)	INSERTION LOSS (dB) ABOVE 3.0 dB		ISOLATION (dB)		PHASE UNBALANCE (Degrees)		AMPLITUDE UNBALANCE (dB)		RETURN LOSS (dB)	
	Typ.	Max.	Typ.	Min.	Typ.	Max.	Typ.	Max.	INPUT Typ.	OUTPUT Typ.
2825-3700	**0.4**	**1.3**	**22**	**13**	**1.0**	**4.0**	**0.1**	**0.3**	**18**	**20**
3200-3500	0.4	1.0	28	18	0.8	4.0	0.1	0.3	20	23

Typical Performance Data

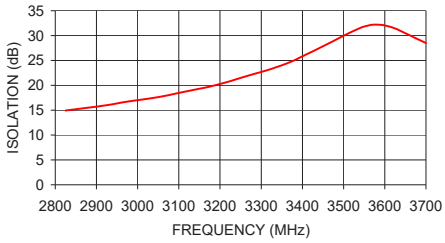
Frequency (MHz)	Total Loss[1] (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	Return Loss (dB)		
	S-1	S-2				S	1	2
2825.00	3.60	3.54	0.06	14.94	0.28	15.39	47.26	31.96
2900.00	3.58	3.52	0.05	15.70	0.22	16.46	41.52	34.99
3000.00	3.54	3.48	0.05	17.02	0.21	18.99	33.34	47.87
3100.00	3.51	3.46	0.05	18.47	0.17	21.86	29.16	39.50
3200.00	3.50	3.45	0.05	20.26	0.14	26.24	25.93	31.34
3300.00	3.50	3.46	0.04	22.71	0.14	30.10	23.20	26.54
3450.00	3.54	3.51	0.04	27.85	0.12	21.96	20.06	21.98
3500.00	3.57	3.53	0.04	29.97	0.13	20.04	19.24	20.75
3550.00	3.60	3.55	0.04	31.81	0.11	18.22	18.51	19.70
3575.00	3.62	3.57	0.05	32.20	0.09	17.56	18.24	19.31
3600.00	3.63	3.58	0.05	32.06	0.06	17.00	17.98	18.95
3625.00	3.65	3.60	0.05	31.43	0.04	16.42	17.72	18.61
3650.00	3.66	3.62	0.05	30.50	0.01	15.80	17.43	18.26
3675.00	3.68	3.64	0.04	29.47	0.02	15.18	17.13	17.88
3700.00	3.70	3.66	0.04	28.52	0.03	14.65	16.85	17.50

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

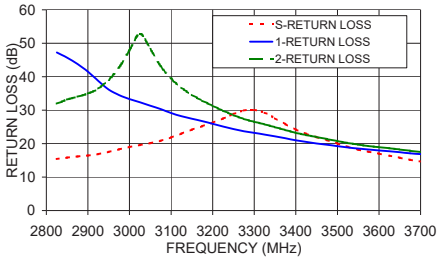
SCN-2-35
TOTAL LOSS



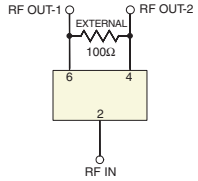
SCN-2-35
ISOLATION



SCN-2-35
RETURN LOSS



electrical schematic



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-Circuits 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-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

2 Way-0° Power Splitter/Combiner SCN-2-35

Typical Performance Data

TEST CONDITIONS: INPUT POWER = 0dBm @Temperature = +25°C

FREQ. (MHz)	TOTAL LOSS[1] (dB)		AMP. UNBAL. (dB)	PHASE UNBAL. (deg.)	ISOLATION (dB)	VSWR (:1)		
	S-1	S-2			1-2	S	1	2
10	3.56	3.54	0.02	0.10	3.56	2.00	1.97	1.98
50	3.55	3.54	0.01	0.05	3.54	2.01	1.96	1.97
100	3.56	3.55	0.01	0.02	3.58	2.00	1.95	1.96
500	3.57	3.59	0.02	0.27	4.25	1.96	1.78	1.79
750	3.58	3.59	0.01	0.31	4.88	1.94	1.63	1.63
800	3.59	3.59	0.00	0.40	5.02	1.93	1.60	1.60
875	3.60	3.59	0.01	0.42	5.24	1.93	1.55	1.55
900	3.59	3.59	0.00	0.45	5.32	1.93	1.54	1.54
1000	3.60	3.59	0.01	0.57	5.63	1.92	1.49	1.48
1100	3.60	3.60	0.00	0.65	5.96	1.92	1.44	1.43
1125	3.60	3.60	0.00	0.68	6.04	1.92	1.42	1.42
1175	3.60	3.60	0.00	0.71	6.20	1.91	1.40	1.40
1200	3.60	3.60	0.00	0.74	6.29	1.91	1.39	1.39
1400	3.61	3.60	0.01	0.85	6.98	1.90	1.30	1.30
1600	3.61	3.59	0.02	0.97	7.72	1.87	1.23	1.23
1700	3.61	3.59	0.02	1.03	8.11	1.86	1.20	1.20
1800	3.61	3.58	0.03	1.10	8.52	1.84	1.17	1.17
1900	3.60	3.57	0.03	1.16	8.93	1.82	1.15	1.15
2000	3.59	3.55	0.04	1.28	9.38	1.79	1.14	1.14
2050	3.59	3.55	0.04	1.31	9.61	1.78	1.13	1.14
2100	3.58	3.54	0.04	1.31	9.85	1.77	1.13	1.13
2150	3.57	3.53	0.04	1.37	10.10	1.75	1.13	1.13
2200	3.57	3.53	0.04	1.38	10.36	1.74	1.12	1.13
2225	3.56	3.53	0.03	1.42	10.50	1.73	1.12	1.13
2250	3.56	3.52	0.04	1.45	10.63	1.72	1.12	1.13
2275	3.56	3.52	0.04	1.46	10.77	1.71	1.12	1.13
2300	3.55	3.51	0.04	1.48	10.92	1.70	1.12	1.13
2350	3.54	3.50	0.04	1.52	11.21	1.68	1.12	1.13
2400	3.53	3.49	0.04	1.56	11.53	1.66	1.13	1.13
2450	3.52	3.48	0.04	1.60	11.86	1.64	1.13	1.13
2500	3.51	3.47	0.04	1.65	12.20	1.61	1.13	1.14
2550	3.50	3.45	0.05	1.66	12.57	1.59	1.13	1.14
2600	3.49	3.44	0.05	1.72	12.94	1.57	1.13	1.14
2650	3.48	3.43	0.05	1.76	13.35	1.54	1.13	1.14
2700	3.47	3.41	0.06	1.77	13.77	1.51	1.13	1.14
2750	3.45	3.40	0.05	1.84	14.23	1.48	1.13	1.14
2800	3.45	3.38	0.07	1.89	14.73	1.45	1.13	1.13
2825	3.44	3.38	0.06	1.88	14.98	1.44	1.12	1.13
2850	3.43	3.37	0.06	1.91	15.24	1.42	1.12	1.13
2900	3.42	3.35	0.07	1.96	15.80	1.39	1.12	1.13
2950	3.41	3.34	0.07	1.99	16.45	1.36	1.11	1.12
3000	3.40	3.33	0.07	2.03	17.09	1.33	1.11	1.12
3100	3.38	3.30	0.08	2.10	18.67	1.27	1.10	1.11
3200	3.37	3.28	0.09	2.18	20.61	1.21	1.09	1.10
3300	3.36	3.27	0.09	2.22	23.29	1.15	1.09	1.08
3400	3.36	3.27	0.09	2.28	27.13	1.12	1.10	1.08
3500	3.38	3.28	0.10	2.36	34.73	1.14	1.12	1.09
3600	3.42	3.31	0.11	2.43	42.16	1.20	1.15	1.10
3700	3.47	3.35	0.12	2.50	29.68	1.29	1.18	1.14
3800	3.53	3.41	0.12	2.56	24.76	1.41	1.22	1.18
3900	3.62	3.49	0.12	2.64	21.68	1.54	1.27	1.24
4000	3.74	3.60	0.13	2.71	19.39	1.70	1.34	1.30
4250	4.14	3.98	0.16	2.92	15.77	2.19	1.52	1.48
4500	4.68	4.50	0.19	3.08	13.57	2.86	1.74	1.70

[1] Total Loss = Insertion Loss+ 3dB Splitter Loss

2 Way-0° Power Splitter/Combiner SCN-2-35

Typical Performance Data

TEST CONDITIONS: INPUT POWER = 0dBm @Temperature = -55°C

FREQ. (MHz)	TOTAL LOSS[1] (dB)		AMP. UNBAL. (dB)	PHASE UNBAL. (deg.)	ISOLATION (dB)	VSWR (:1)		
	S-1	S-2			1-2	S	1	2
10	3.54	3.53	0.01	0.10	3.54	2.01	1.97	1.99
50	3.52	3.53	0.01	0.15	3.50	2.02	1.96	1.98
100	3.54	3.51	0.02	0.27	3.56	2.00	1.97	1.96
500	3.49	3.53	0.04	0.11	4.17	1.97	1.80	1.82
750	3.49	3.49	0.00	0.47	4.79	1.94	1.66	1.65
800	3.49	3.49	0.00	0.35	4.93	1.94	1.63	1.62
875	3.49	3.49	0.00	0.40	5.13	1.93	1.58	1.57
900	3.48	3.48	0.00	0.38	5.21	1.93	1.57	1.56
1000	3.48	3.49	0.01	0.22	5.51	1.93	1.51	1.51
1100	3.47	3.48	0.01	0.39	5.83	1.92	1.46	1.46
1125	3.47	3.48	0.01	0.35	5.91	1.91	1.45	1.44
1175	3.47	3.48	0.01	0.29	6.07	1.91	1.43	1.42
1200	3.46	3.48	0.02	0.27	6.14	1.92	1.41	1.41
1400	3.45	3.49	0.04	0.38	6.78	1.91	1.32	1.33
1600	3.44	3.48	0.04	0.52	7.47	1.90	1.23	1.26
1700	3.44	3.46	0.02	0.61	7.84	1.89	1.21	1.22
1800	3.43	3.45	0.02	0.60	8.25	1.87	1.19	1.21
1900	3.44	3.45	0.01	0.69	8.62	1.87	1.16	1.18
2000	3.42	3.44	0.02	0.76	9.04	1.86	1.14	1.18
2050	3.43	3.44	0.01	0.77	9.25	1.85	1.14	1.17
2100	3.42	3.43	0.01	0.79	9.48	1.85	1.14	1.18
2150	3.41	3.43	0.02	0.87	9.73	1.83	1.14	1.18
2200	3.41	3.41	0.00	0.95	9.98	1.83	1.14	1.18
2225	3.42	3.41	0.01	0.92	10.10	1.82	1.14	1.18
2250	3.42	3.41	0.01	0.91	10.22	1.82	1.14	1.18
2275	3.42	3.41	0.01	0.92	10.36	1.82	1.14	1.18
2300	3.41	3.40	0.01	0.93	10.49	1.81	1.14	1.18
2350	3.41	3.39	0.02	0.94	10.76	1.80	1.14	1.19
2400	3.40	3.38	0.02	0.92	11.07	1.79	1.15	1.20
2450	3.39	3.37	0.02	0.90	11.40	1.77	1.15	1.20
2500	3.37	3.35	0.02	0.92	11.75	1.74	1.15	1.20
2550	3.36	3.33	0.03	0.96	12.11	1.71	1.15	1.20
2600	3.36	3.32	0.04	0.92	12.47	1.70	1.16	1.21
2650	3.35	3.31	0.04	0.90	12.87	1.68	1.16	1.21
2700	3.33	3.28	0.05	0.87	13.29	1.65	1.16	1.20
2750	3.32	3.27	0.05	0.82	13.73	1.62	1.16	1.20
2800	3.31	3.26	0.05	0.81	14.22	1.60	1.16	1.20
2825	3.29	3.25	0.04	0.84	14.49	1.58	1.15	1.20
2850	3.28	3.23	0.05	0.82	14.76	1.57	1.15	1.19
2900	3.26	3.20	0.05	0.82	15.36	1.52	1.14	1.18
2950	3.24	3.18	0.06	0.84	16.03	1.48	1.13	1.17
3000	3.21	3.16	0.05	0.82	16.72	1.43	1.12	1.15
3100	3.18	3.11	0.07	0.84	18.35	1.34	1.09	1.12
3200	3.14	3.07	0.07	0.83	20.55	1.23	1.07	1.08
3300	3.11	3.04	0.07	0.78	23.23	1.14	1.07	1.03
3400	3.10	3.03	0.07	0.78	27.86	1.06	1.11	1.04
3500	3.11	3.04	0.07	0.80	36.98	1.11	1.16	1.10
3600	3.15	3.09	0.06	0.73	36.62	1.22	1.20	1.16
3700	3.22	3.15	0.07	0.78	27.73	1.36	1.25	1.24
3800	3.30	3.23	0.07	0.81	23.77	1.51	1.31	1.33
3900	3.41	3.35	0.07	0.84	20.86	1.69	1.37	1.42
4000	3.55	3.49	0.06	0.87	18.86	1.89	1.44	1.52
4250	3.98	3.89	0.09	0.99	15.59	2.46	1.61	1.74
4500	4.44	4.32	0.12	1.17	13.52	3.09	1.75	1.91

[1] Total Loss = Insertion Loss+ 3dB Splitter Loss

2 Way-0° Power Splitter/Combiner SCN-2-35

Typical Performance Data

TEST CONDITIONS: INPUT POWER = 0dBm @Temperature = +100°C

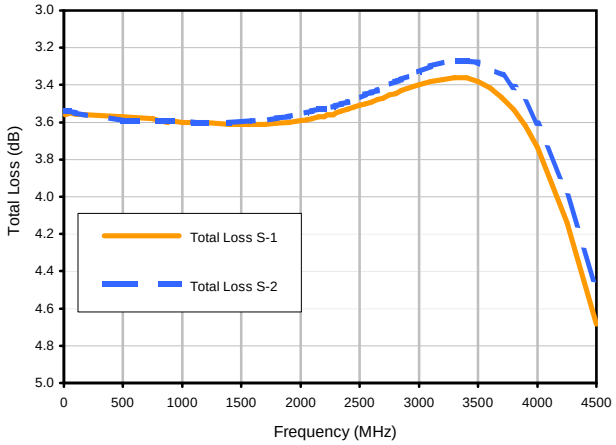
FREQ. (MHz)	TOTAL LOSS[1] (dB)		AMP. UNBAL. (dB)	PHASE UNBAL. (deg.)	ISOLATION (dB)	VSWR (:1)		
	S-1	S-2			1-2	S	1	2
10	3.57	3.55	0.02	0.13	3.58	2.00	1.96	1.97
50	3.56	3.54	0.02	0.04	3.57	2.00	1.96	1.96
100	3.56	3.58	0.02	0.26	3.59	2.01	1.93	1.96
500	3.61	3.63	0.02	0.62	4.26	1.97	1.76	1.77
750	3.64	3.65	0.01	0.90	4.90	1.95	1.61	1.61
800	3.65	3.64	0.01	1.04	5.05	1.95	1.58	1.57
875	3.65	3.65	0.00	1.17	5.28	1.95	1.53	1.53
900	3.65	3.65	0.00	1.24	5.36	1.94	1.52	1.51
1000	3.66	3.65	0.01	1.40	5.69	1.93	1.46	1.46
1100	3.67	3.66	0.01	1.60	6.03	1.93	1.41	1.41
1125	3.68	3.67	0.01	1.65	6.11	1.93	1.40	1.39
1175	3.69	3.67	0.02	1.68	6.28	1.93	1.38	1.37
1200	3.69	3.67	0.02	1.74	6.37	1.93	1.36	1.35
1400	3.70	3.67	0.03	2.08	7.11	1.90	1.29	1.27
1600	3.70	3.65	0.05	2.42	7.90	1.87	1.22	1.19
1700	3.71	3.65	0.06	2.64	8.30	1.85	1.19	1.16
1800	3.70	3.63	0.07	2.84	8.74	1.82	1.16	1.13
1900	3.69	3.61	0.08	3.02	9.19	1.78	1.14	1.11
2000	3.66	3.59	0.07	3.27	9.68	1.74	1.13	1.09
2050	3.66	3.58	0.08	3.36	9.93	1.71	1.12	1.08
2100	3.65	3.57	0.08	3.46	10.19	1.69	1.11	1.08
2150	3.64	3.56	0.08	3.60	10.45	1.67	1.11	1.07
2200	3.63	3.56	0.07	3.67	10.73	1.65	1.10	1.07
2225	3.62	3.55	0.07	3.74	10.88	1.63	1.10	1.07
2250	3.61	3.55	0.06	3.80	11.03	1.62	1.10	1.07
2275	3.61	3.54	0.07	3.83	11.18	1.60	1.10	1.06
2300	3.60	3.54	0.06	3.90	11.34	1.59	1.10	1.06
2350	3.59	3.53	0.06	3.99	11.65	1.56	1.10	1.06
2400	3.57	3.51	0.06	4.09	11.99	1.53	1.10	1.06
2450	3.56	3.50	0.06	4.18	12.34	1.50	1.10	1.06
2500	3.55	3.49	0.06	4.28	12.70	1.47	1.10	1.07
2550	3.53	3.48	0.05	4.34	13.10	1.44	1.10	1.07
2600	3.52	3.47	0.05	4.43	13.49	1.41	1.10	1.07
2650	3.51	3.46	0.05	4.49	13.90	1.38	1.10	1.07
2700	3.50	3.45	0.05	4.57	14.33	1.35	1.10	1.08
2750	3.49	3.44	0.05	4.64	14.80	1.31	1.10	1.09
2800	3.49	3.44	0.05	4.71	15.31	1.28	1.10	1.09
2825	3.47	3.42	0.05	4.71	15.56	1.27	1.10	1.10
2850	3.47	3.42	0.05	4.76	15.81	1.25	1.10	1.10
2900	3.46	3.42	0.04	4.84	16.37	1.23	1.10	1.11
2950	3.46	3.41	0.05	4.87	17.01	1.20	1.10	1.12
3000	3.46	3.41	0.05	4.95	17.63	1.18	1.11	1.13
3100	3.45	3.40	0.05	5.05	19.14	1.14	1.11	1.14
3200	3.46	3.40	0.06	5.16	20.92	1.11	1.12	1.16
3300	3.48	3.42	0.06	5.23	23.36	1.12	1.13	1.19
3400	3.50	3.43	0.07	5.35	26.74	1.15	1.14	1.20
3500	3.53	3.45	0.08	5.45	32.68	1.20	1.15	1.22
3600	3.58	3.49	0.09	5.57	44.44	1.26	1.16	1.22
3700	3.62	3.52	0.10	5.70	32.84	1.33	1.17	1.23
3800	3.68	3.56	0.12	5.83	26.69	1.40	1.19	1.23
3900	3.74	3.62	0.12	6.00	23.18	1.48	1.22	1.22
4000	3.83	3.69	0.14	6.15	20.55	1.58	1.25	1.22
4250	4.10	3.94	0.16	6.75	16.41	1.89	1.40	1.22
4500	4.52	4.35	0.18	7.32	13.81	2.37	1.60	1.34

[1] Total Loss = Insertion Loss+ 3dB Splitter Loss

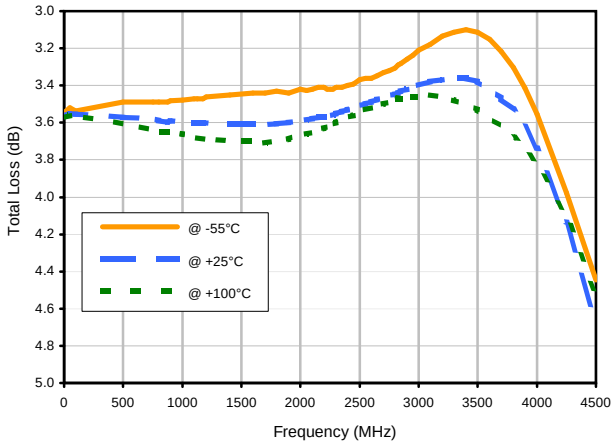
2 Way-0° Power Splitter/Combiner SCN-2-35

Typical Performance Curves

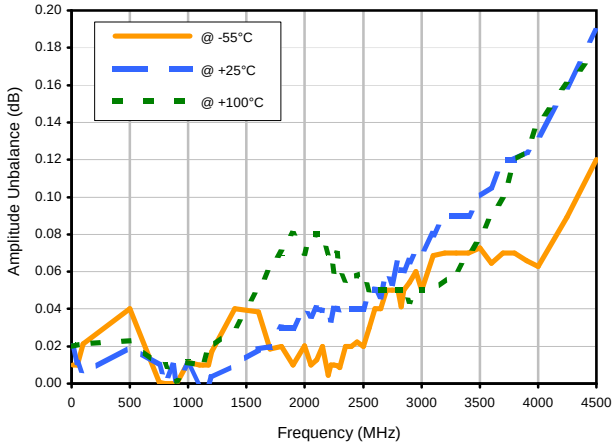
Total Loss



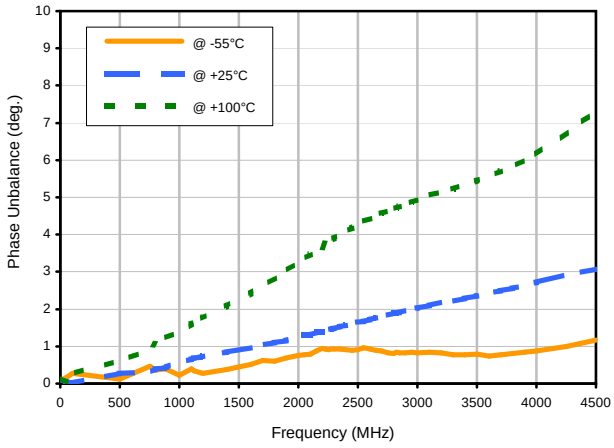
Total Loss S-1 vs. TEMPERATURE



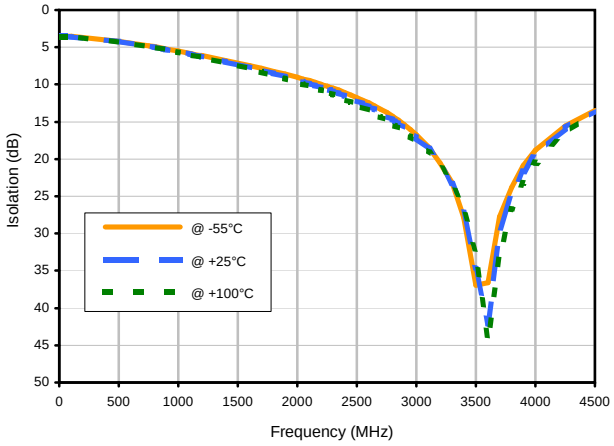
Amplitude Unbalance vs. TEMPERATURE



Phase Unbalance vs. TEMPERATURE

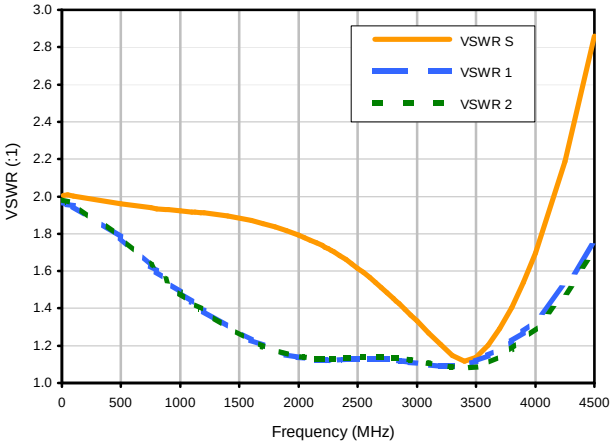


Isolation 1-2 vs. TEMPERATURE

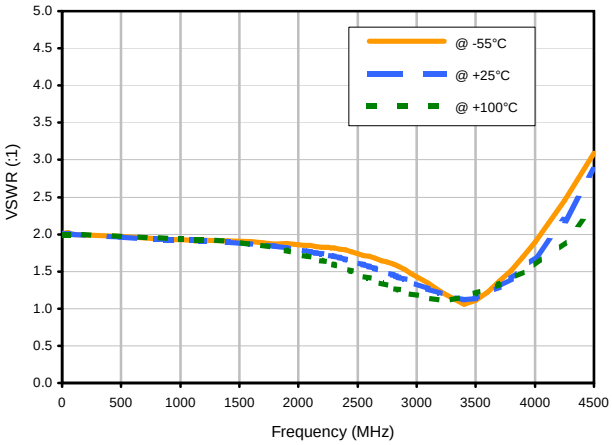


Typical Performance Curves

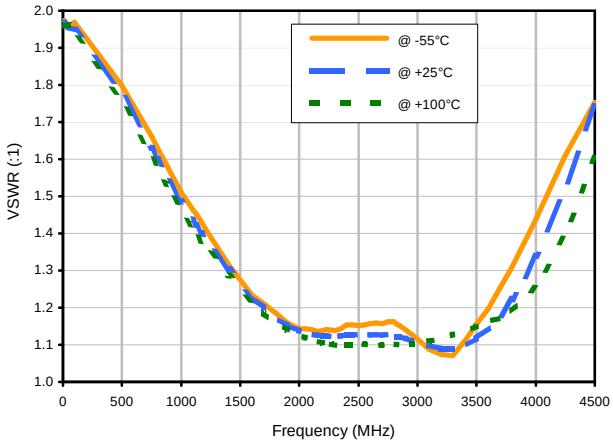
VSWR



VSWR SUM vs. TEMPERATURE



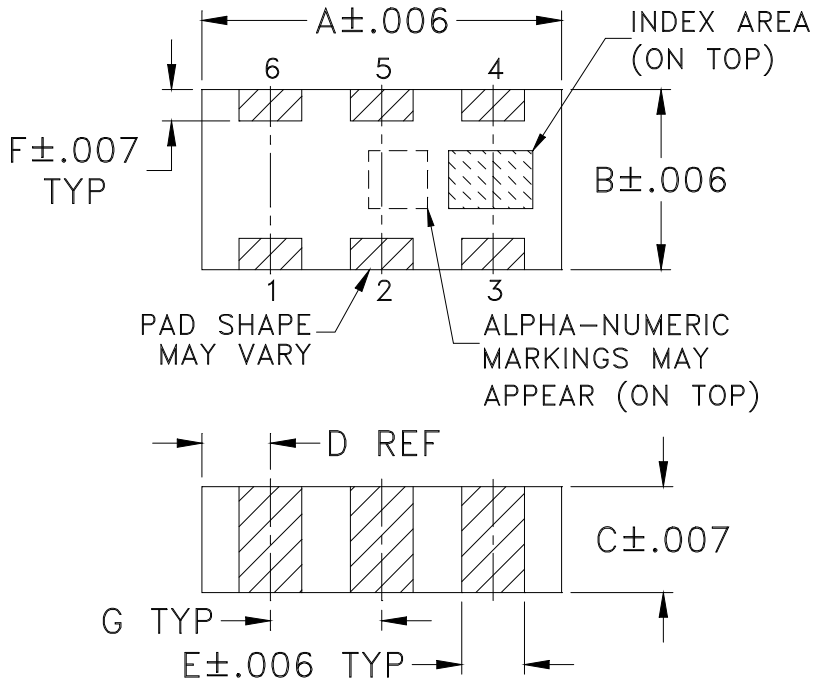
VSWR OUT1 vs. TEMPERATURE



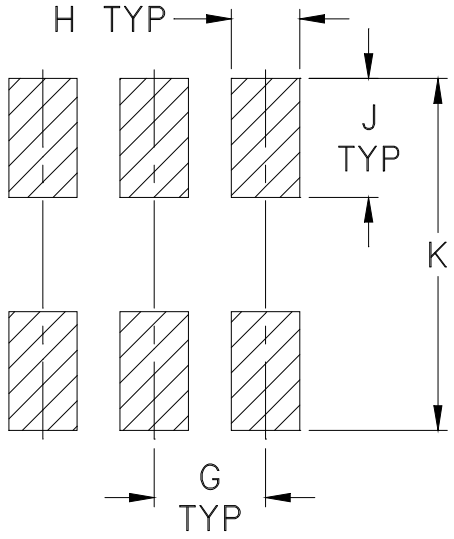
Case Style FV

FV1206-1

Outline Dimensions



PCB Land Pattern



Suggested Layout,
Tolerance to be within ±.002

CASE #	A	B	C	D	E	F	G	H	J	K	L	M	N	P	WT. GRAM
FV1206-1	.126 (3.20)	.063 (1.60)	.035 (0.89)	.024 (0.61)	.022 (0.56)	.011 (0.28)	.039 (0.99)	.024 (0.61)	.042 (1.07)	.123 (3.12)	-- --	-- --	-- --	-- --	.020

Dimensions are in inches (mm). Tolerances: 2 Pl. ± .01; 3 Pl. ± .005

Notes:

1. Open style, ceramic base.
2. Termination finish: **as shown below or indicated on Data Sheet.**
   For RoHS Case Styles: Tin plate over Nickel plate. All models, (+) suffix.
   For RoHS-5 Case Styles: Tin-Lead plate. All models, no (+) suffix.

Tape & Reel Packaging TR-F75

DEVICE ORIENTATION IN T&R

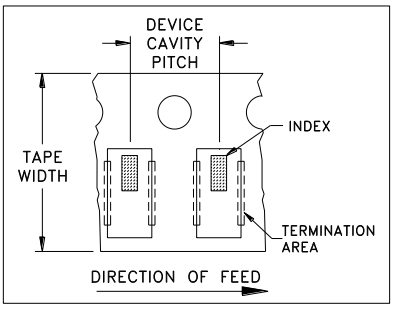


ILLUSTRATION 1

Applicable Case Styles
FV1206-1
FV1206-3

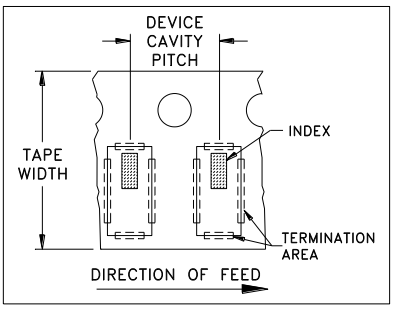


ILLUSTRATION 2

Applicable Case Styles
FV1206-4
FV1206-5
FV1206-6
FV1206-7
FV1206-9

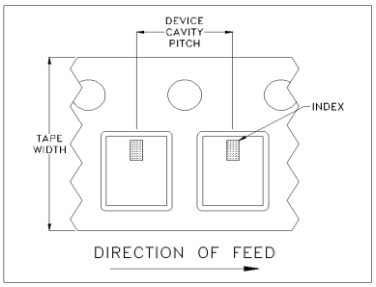


ILLUSTRATION 3

Applicable Case Styles
FV1206-12
GE0805C-18
NL1008C-6
NL1008C-7
NL1008C-9
NL1008C-10

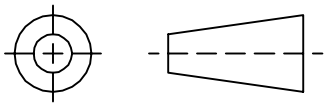
Tape Width, mm	Device Cavity Pitch, mm	Reel Size, inches	Devices per Reel	
8	4	7	Small quantity standards (see note)	20
				50
				100
				200
				500
				1000
			Standard	3000

Note: Please consult individual model data sheet to determine device per reel availability.

Mini-Circuits carrier tape materials provide protection from ESD (Electro-Static Discharge) during handling and transportation. Tapes are static dissipative and comply with industry standards EIA-481/EIA-541.

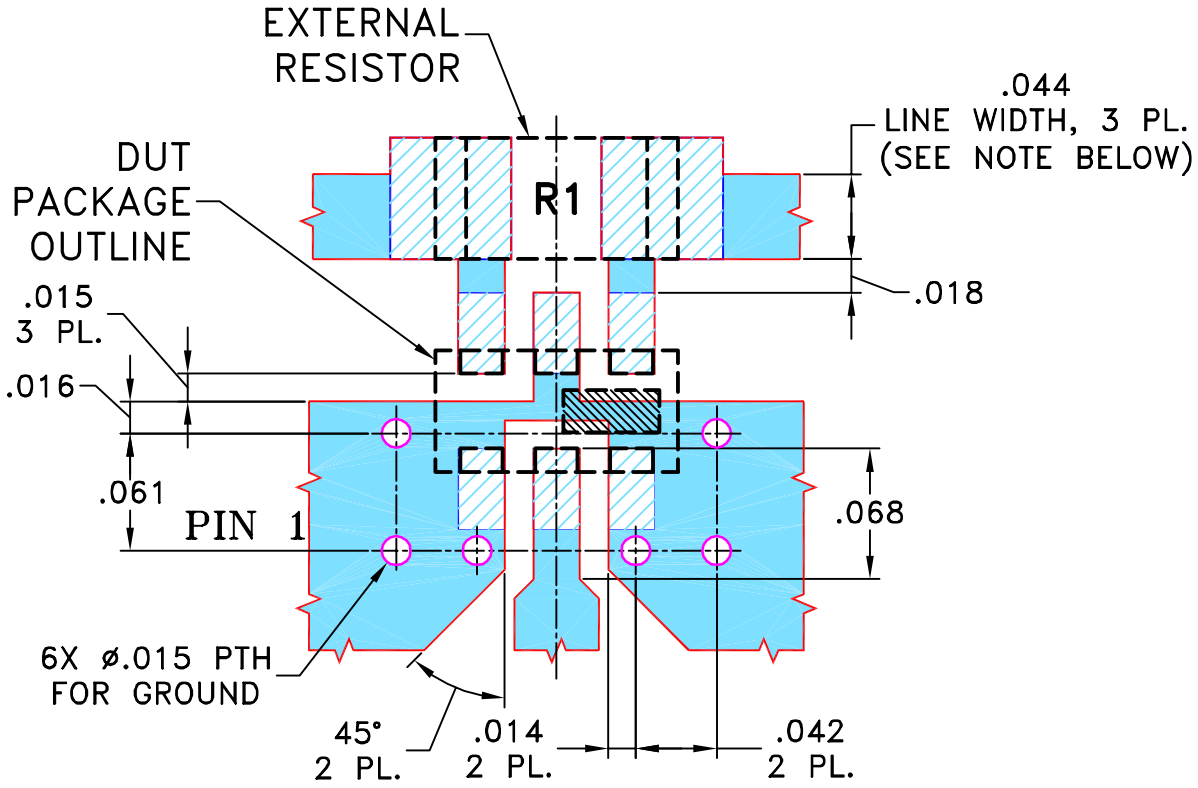
Go to: www.minicircuits.com/pages/pdfs/tape.pdf

THIRD ANGLE PROJECTION



REVISIONS					
REV	ECN No.	DESCRIPTION	DATE	DR	AUTH
A	M86650	UPDATED NOTE 2	04/18/03	GF	DJ
B	M86880	CHANGED APPEARANCE	05/05/03	IL	ABD
C	M91639	REMOVED NOTE 2, UPDATED DIMENSIONS	04/14/04	AV	DJ
D	M102713	ADDED"...WITH SMOBC"	01/16/06	GF	IL

SUGGESTED MOUNTING CONFIGURATION FOR FV1206-1 CASE STYLE, "pa" PIN CONNECTION.



RESISTOR R1: 100 Ohm, 1206 SIZE

NOTES: 1.TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS 0.020" ± 0.0015"; 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

UNLESS OTHERWISE SPECIFIED		INITIALS	DATE
DIMENSIONS ARE IN INCHES	DRAWN	GF	04/11/03
TOLERANCES ON:	CHECKED	IL	04/15/03
2 PL DECIMALS ±	APPROVED	ABD	04/15/03
3 PL DECIMALS ± .005			
ANGLES ±			
FRACTIONS ±			

ASHEETA1.DWG REV:A DATE:01/12/95

Mini-Circuits® 13 Neptune Avenue Brooklyn NY 11235

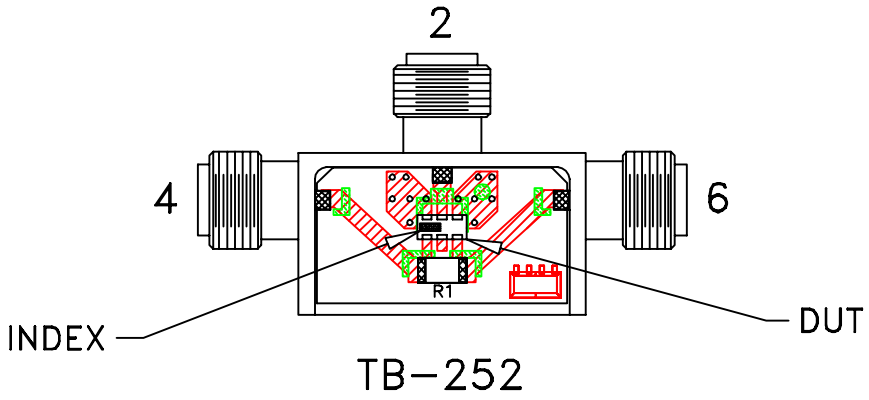
PL, pa, FV1206-1, SCN, TB-252

SIZE	CODE IDENT	DRAWING NO:	REV:
A	15542	98-PL-129	D

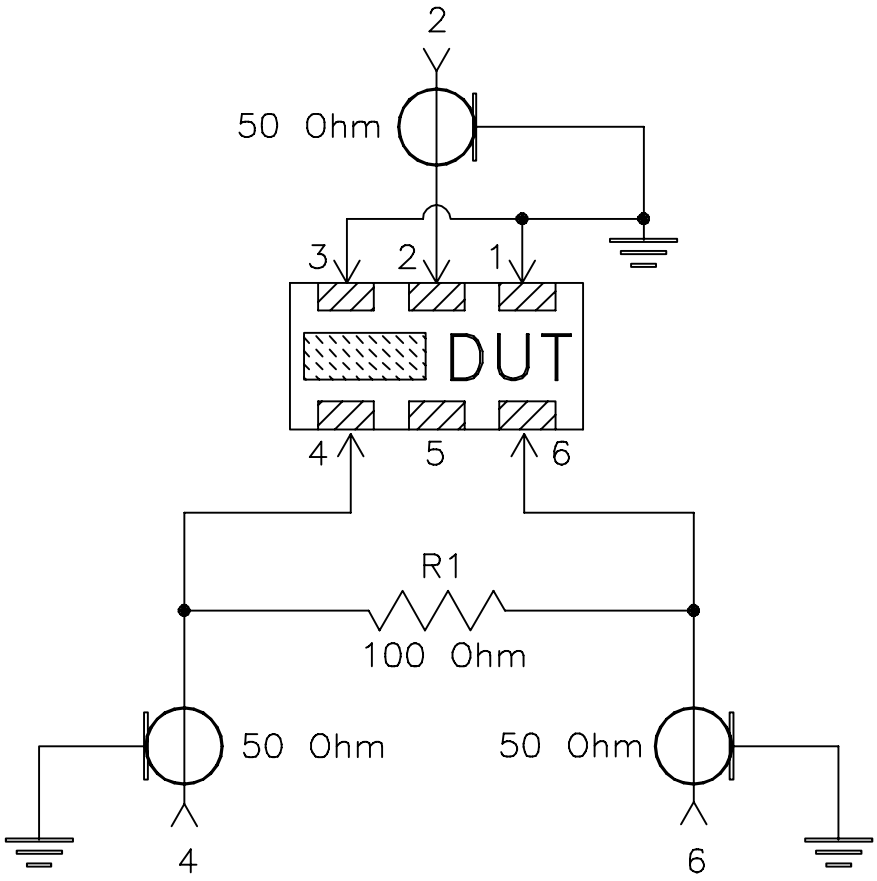
FILE:	SCALE:	SHEET:
98PL129	10:1	1 OF 1

Evaluation Board and Circuit

For Pin Connections refer to Data Sheet of the DUT



TB-252



Schematic Diagram

Notes:

1. SMA Female connectors.
2. PCB Material: Rogers RO4350 or equivalent, Dielectric Constant=3.5, Thickness=.020 inch.

Mini-Circuits®

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Environmental Specifications ENV06

All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-55° to 100°C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Humidity	90 to 95% RH, 240 hours, 50°C	MIL-STD-202, Method 103, Condition A, Except 50°C and end-point electrical test done within 12 hours
Solder Reflow Heat	Sn-Pb Eutetic Process: 225°C peak Pb-Free Process 245° - 250°C peak	J-STD-020, Table 4-1, 4-2 and 5-2, Figure 5-1
Solderability	10X Magnification	J-STD-002, Para 4.2.5, Test S, 95% Coverage
Vibration (High Frequency)	20g peak, 10-2000 Hz, 12 times in each of three perpendicular directions (total 36)	MIL-STD-202, Method 204, Condition D
Mechanical Shock	50g, 11 ms, 1/2-sine, 18 shocks: 3 each direction, each of 3 axes	MIL-STD-202, Method 213, Condition A