

3 Way-0° 50Ω 5 to 1450 MHz

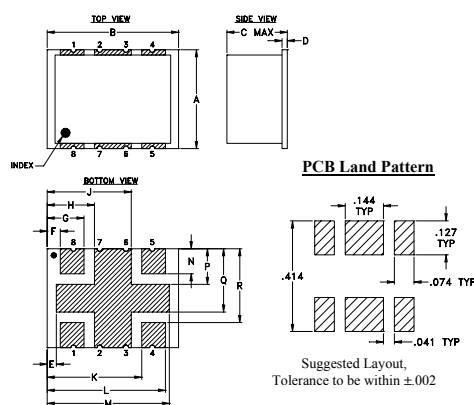
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.15W max.
Permanent damage may occur if any of these limits are exceeded.	

Pin Connections

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

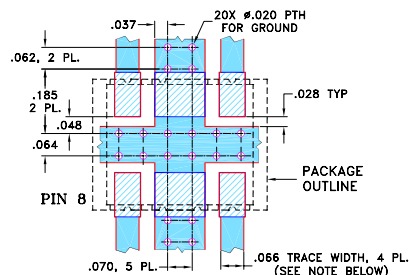
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
.38	.50	.25	.020	.035	.050	.140	.180
9.65	12.70	6.35	0.51	0.89	1.27	3.56	4.57
J	K	L	M	N	P	Q	R
.320	.360	.450	.465	.095	.135	.240	.280
8.13	9.14	11.43	11.81	2.41	3.43	6.10	7.11
							wt
							grams
							0.80

Demo Board MCL P/N: TB-364 Suggested PCB Layout (PL-231)



NOTES:

- TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .030" ± .002"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
- 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

Notes

- 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.
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Features

- low insertion loss 1.5, dB typ. at midband
- wide frequency band, 5 to 1450 MHz
- low amplitude unbalance, 0.3 dB typ.

Applications

- VHF/UHF CATV
- cellular
- GPS
- satellite distribution



CASE STYLE: AH202

PRICE: \$15.95 ea. QTY. (1-9)

+RoHS Compliant

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

Electrical Specifications at 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency Range		5		1450	MHz
Insertion Loss Above 4.8 dB	5-400	—	0.7	1.3	
	400-1200	—	1.5	2.4	dB
	1200-1450	—	2.2	3.3	
Isolation	5-400	17	24	—	
	400-1200	15	20	—	dB
	1200-1450	13	19	—	
Phase Unbalance	5-400	—	—	2.0	
	400-1200	—	—	5.0	Degree
	1200-1450	—	—	9.0	
Amplitude Unbalance	5-400	—	—	0.3	
	400-1200	—	—	0.7	dB
	1200-1450	—	—	0.9	
VSWR (Port S)	5-400	—	1.20	—	
	400-1200	—	1.65	—	:1
	1200-1450	—	1.65	—	
VSWR (Port 1-3)	5-400	—	1.10	—	
	400-1200	—	1.20	—	:1
	1200-1450	—	1.20	—	

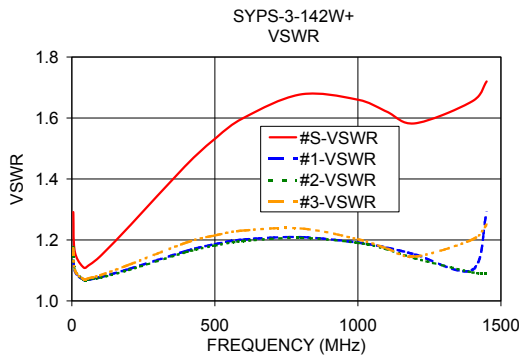
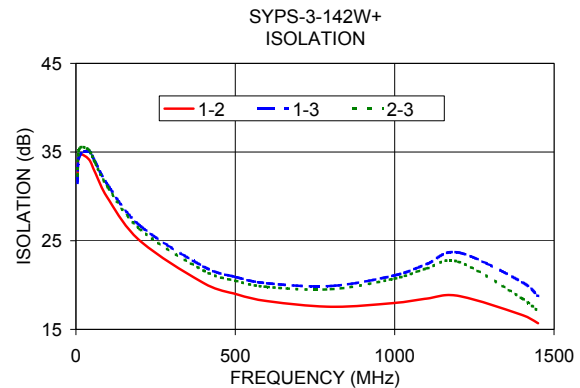
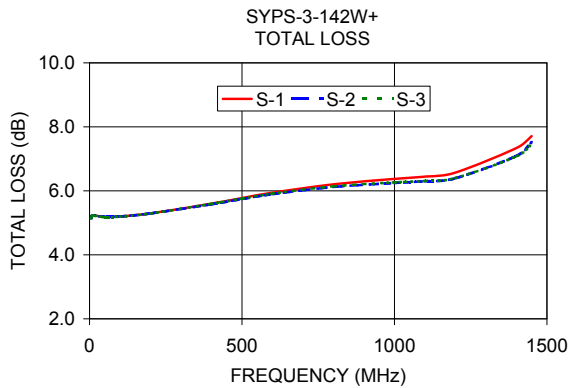
Electrical Schematic



Typical Performance Data

Freq. (MHz)	Total Loss ¹ (dB)			Amp. Unbal. (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR	VSWR	VSWR	VSWR
	S-1	S-2	S-3		1-2	1-3	2-3		S	1	2	3
5.00	5.15	5.15	5.14	0.01	31.98	31.52	32.33	0.04	1.29	1.17	1.18	1.17
10.00	5.23	5.23	5.22	0.01	34.60	34.45	35.32	0.03	1.16	1.10	1.10	1.10
40.00	5.20	5.19	5.19	0.01	34.20	35.08	35.25	0.03	1.11	1.07	1.07	1.07
60.00	5.19	5.18	5.18	0.01	32.72	33.92	33.79	0.04	1.12	1.07	1.07	1.07
100.00	5.20	5.20	5.19	0.01	29.79	31.28	31.02	0.04	1.15	1.08	1.08	1.08
200.00	5.30	5.29	5.29	0.00	25.02	26.73	26.32	0.14	1.24	1.10	1.10	1.12
400.00	5.60	5.58	5.59	0.02	20.24	22.09	21.64	0.29	1.45	1.16	1.16	1.19
500.00	5.78	5.74	5.76	0.03	19.00	20.92	20.48	0.35	1.53	1.19	1.18	1.21
600.00	5.94	5.90	5.91	0.05	18.19	20.20	19.79	0.48	1.60	1.20	1.20	1.23
800.00	6.20	6.12	6.14	0.08	17.55	19.89	19.53	0.98	1.68	1.21	1.21	1.24
1000.00	6.37	6.25	6.26	0.13	17.98	21.09	20.73	1.61	1.66	1.19	1.19	1.20
1100.00	6.45	6.30	6.31	0.14	18.47	22.36	21.87	2.14	1.62	1.17	1.17	1.17
1200.00	6.57	6.39	6.40	0.18	18.78	23.67	22.63	2.76	1.58	1.15	1.14	1.15
1400.00	7.34	7.09	7.08	0.26	16.62	20.33	18.49	4.89	1.66	1.10	1.09	1.20
1450.00	7.71	7.52	7.46	0.26	15.69	18.76	17.06	5.31	1.72	1.29	1.09	1.25

1. Total Loss = Insertion Loss + 4.8dB splitter loss.



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