

2 Way-0° 75Ω 2 to 500 MHz

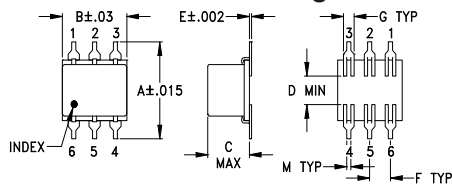
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.125W max.
Permanent damage may occur if any of these limits are exceeded.	

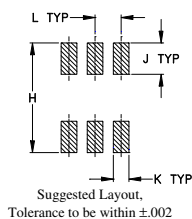
Pin Connections

SUM PORT	6
PORT 1	4
PORT 2	3
GROUND	1
NOT USED	2,5

Outline Drawing

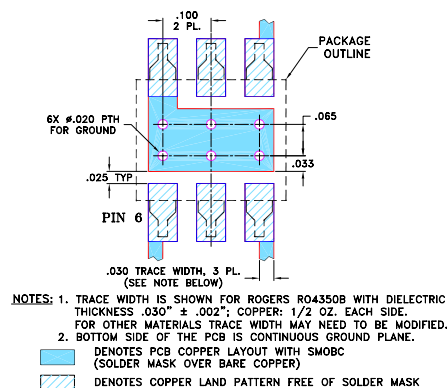


PCB Land Pattern



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.400	.31	.200	.10	.010	.100	.050
10.16	7.87	5.08	2.54	0.25	2.54	1.27
H	J	K	L	M	wt	
.420	.120	.060	.100	.020	grams	
10.67	3.05	1.52	2.54	0.51	0.55	

Demo Board MCL P/N: TB-221
Suggested PCB Layout (PL-235)

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

Features

- insertion loss 0.35 dB typ.
- high isolation, 35 dB typ.

Applications

- VHF/UHF
- catv
- communications systems



CASE STYLE: QQQ130

+RoHS Compliant

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

Electrical Specifications

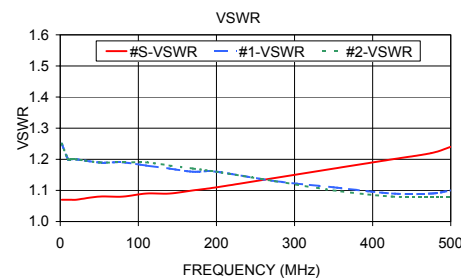
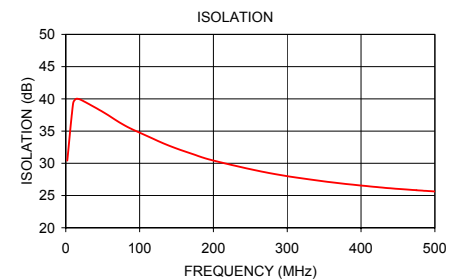
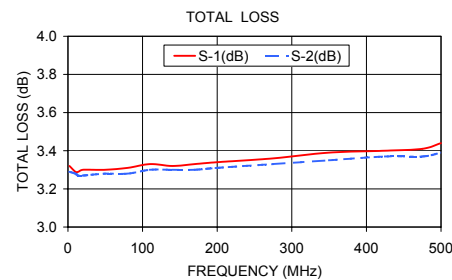
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 3.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L		M		U	
f_L - f_U	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
2-500	35	18	35	25	27	20	0.3	0.8	0.35	0.6	0.5	1.0	1.0	2.0	3.0	0.15	0.2	0.3

L = 2-20 MHz M = 20-250 MHz U = 250-500 MHz

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						
2.00	3.32	3.29	0.03	30.42	0.05	1.07	1.25	1.25
10.00	3.29	3.28	0.01	39.35	0.00	1.07	1.20	1.20
14.00	3.29	3.27	0.03	39.99	0.01	1.07	1.20	1.20
20.00	3.30	3.27	0.02	39.87	0.05	1.07	1.20	1.20
50.00	3.30	3.28	0.02	37.98	0.01	1.08	1.19	1.19
80.00	3.31	3.28	0.03	35.87	0.11	1.08	1.19	1.19
110.00	3.33	3.30	0.03	34.24	0.17	1.09	1.18	1.19
140.00	3.32	3.30	0.03	32.73	0.18	1.09	1.17	1.18
170.00	3.33	3.30	0.03	31.50	0.24	1.10	1.16	1.17
200.00	3.34	3.31	0.03	30.43	0.22	1.11	1.16	1.16
275.00	3.36	3.33	0.03	28.50	0.38	1.14	1.13	1.13
350.00	3.39	3.35	0.04	27.19	0.40	1.17	1.11	1.10
425.00	3.40	3.37	0.03	26.27	0.49	1.20	1.09	1.08
475.00	3.41	3.37	0.04	25.83	0.48	1.22	1.09	1.08
500.00	3.44	3.39	0.05	25.63	0.49	1.24	1.10	1.08

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



electrical schematic

