Surface Mount

Power Splitter/Combiner

JYPS-2-4-75+

2 Way-0° 75Ω 5 to 1000 MHz

CASE STYLE: BJ293

Maximum Ratings

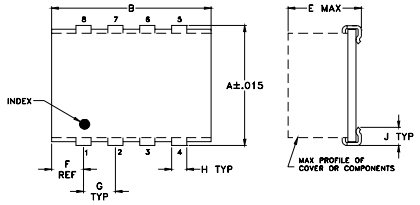
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	0.5W max.
Internal Dissipation	0.125W max.

Permanent damage may occur if any of these limits are exceeded.

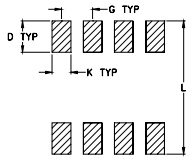
Pin Connections

SUM PORT	1
PORT 1	3
PORT 2	6
GROUND	7,8
NOT USED	2,4,5

Outline Drawing



PCB Land Pattern



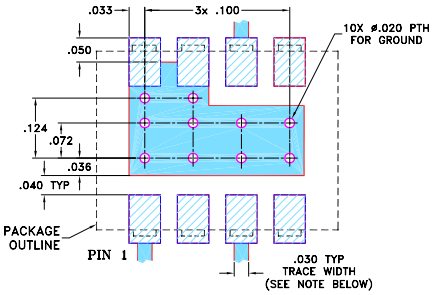
Suggested Layout,
Tolerance to be within ±.002

Outline Dimensions (inch / mm)

A	B	C	D	E	F	G
.395	.500	--	.100	.230	.100	.100
10.03	12.70	--	2.54	5.84	2.54	2.54

H	J	K	L	wt
.047	.065	.065	.425	grams
1.19	1.65	1.65	10.80	0.80

Demo Board MCL P/N: TB-105
Suggested PCB Layout (PL-069)



NOTES: 1.TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS 0.030" ± 0.002"; 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

Features

- wideband, 5 to 1000 MHz
- excellent insertion loss 0.4 dB typ.
- good isolation, 25 dB typ.
- excellent VSWR, 1.1:1 typ.

Applications

- cable TV
- VHF/UHF
- communications systems

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

Electrical Specifications

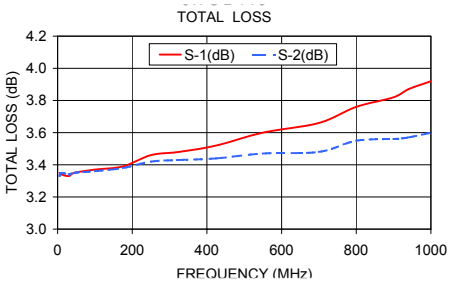
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 3.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L	M	U	L	M	U
f_L-f_U	Typ.	Min	Typ.	Min	Typ.	Min	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
5-1000	24	17	25	20	30	18	0.4	0.8	0.4	1.0	0.8	1.5	3.0	4.0	5.0	0.2	0.3	0.4

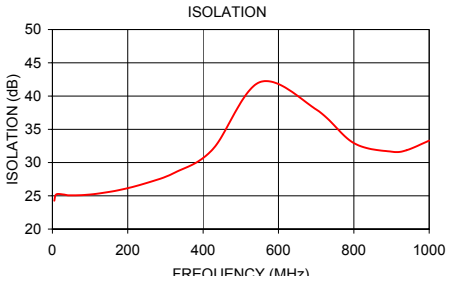
L = 5-50 MHz M = 50-500 MHz U = 500-1000 MHz

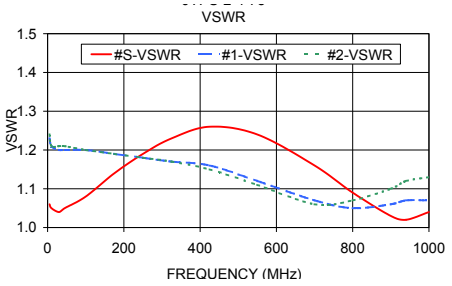
Typical Performance Data

Frequency (MHz)	Total Loss[1] (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
5.00	3.35	3.33	0.02	24.26	0.03	1.06	1.23	1.24
10.00	3.34	3.35	0.01	25.21	0.01	1.05	1.21	1.21
30.00	3.33	3.34	0.01	25.19	0.05	1.04	1.20	1.21
45.00	3.35	3.35	0.00	25.07	0.08	1.05	1.20	1.21
100.00	3.37	3.36	0.00	25.19	0.16	1.08	1.20	1.20
175.00	3.39	3.38	0.02	25.84	0.34	1.14	1.19	1.19
250.00	3.46	3.42	0.04	26.93	0.46	1.19	1.18	1.18
325.00	3.48	3.43	0.04	28.49	0.61	1.23	1.17	1.17
425.00	3.52	3.44	0.07	31.97	0.73	1.26	1.16	1.15
550.00	3.60	3.47	0.14	42.08	0.86	1.24	1.12	1.11
700.00	3.66	3.48	0.18	37.99	0.84	1.16	1.07	1.06
800.00	3.76	3.55	0.21	32.92	0.84	1.09	1.05	1.07
900.00	3.82	3.56	0.27	31.64	0.59	1.03	1.06	1.10
940.00	3.87	3.57	0.30	31.86	0.42	1.02	1.07	1.12
1000.00	3.92	3.60	0.32	33.30	0.12	1.04	1.07	1.13

1. Total Loss = Insertion Loss + 3dB splitter 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

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