

Surface Mount Power Splitter/Combiner

JYPS-2-4-75+

2 Way-0° 75Ω 5 to 1000 MHz



Generic photo used for illustration purposes only
CASE STYLE: BJ293

Maximum Ratings

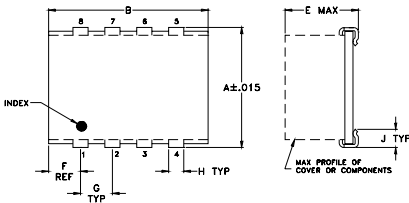
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	0.5W max.
Internal Dissipation	0.125W max.

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

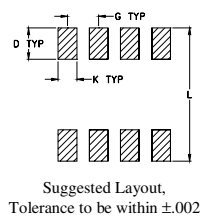
Pin Connections

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

Outline Drawing



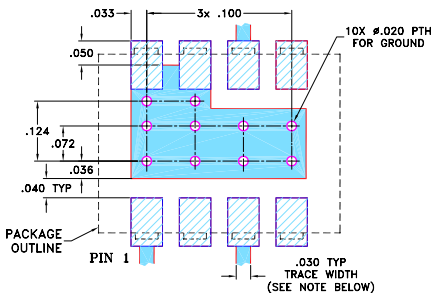
PCB Land Pattern



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:
- 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.
 - 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

Electrical Specifications

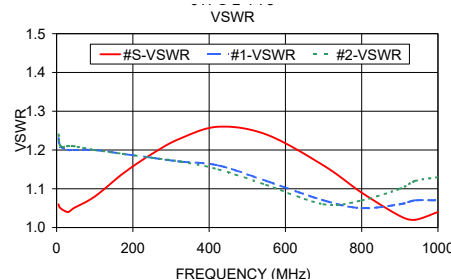
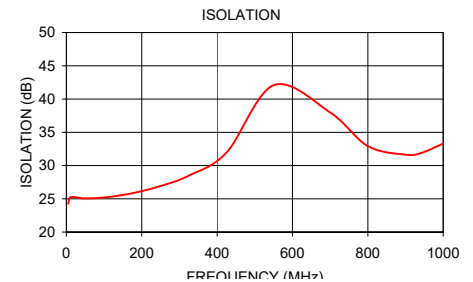
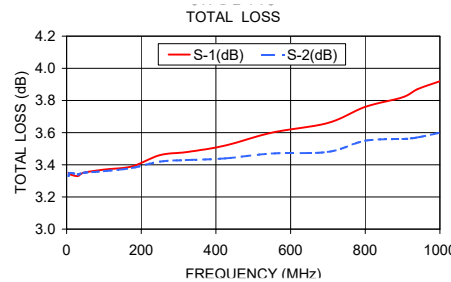
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 3.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L	M	U	L	M	U
f _c -f _u	Typ.	Min	Typ.	Min	Typ.	Min	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
5-1000	24	17	25	20	30	18	0.4	0.8	0.4	1.0	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

- 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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