

Surface Mount Power Splitter/Combiner

16 Way-0° 75Ω 10 to 800 MHz

JEPS-16-1W-75+

Maximum Ratings

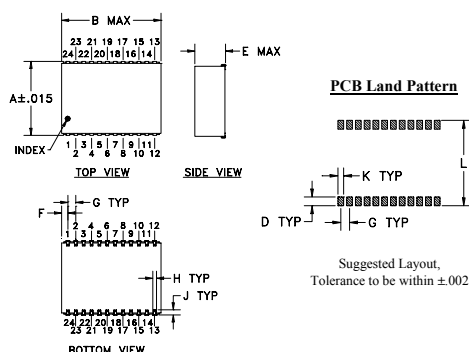
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	0.5W max.
Internal Dissipation	0.275W max.

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

Pin Connections

SUM PORT	18	PORT 9	13
PORT 1	2	PORT 10	14
PORT 2	3	PORT 11	15
PORT 3	4	PORT 12	16
PORT 4	5	PORT 13	20
PORT 5	9	PORT 14	21
PORT 6	10	PORT 15	22
PORT 7	11	PORT 16	23
PORT 8	12	GROUND	1,6,7,8,17,19,24

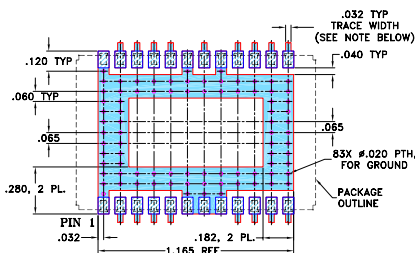
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F
.940	1.426	--	.100	.250	.163
23.88	36.22	--	2.54	6.35	4.14
G	H	J	K	L	W
.100	.047	.065	.065	.970	grams
2.54	1.19	1.65	1.65	24.64	6.4

Demo Board MCL P/N: TB-220 Suggested PCB Layout (PL-107)



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.
3. DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
4. 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuit's 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-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp

Features

- wideband, 10 to 800 MHz
- good input VSWR, 1.35:1 typ.
- excellent output VSWR, 1.16:1 typ.
- shielded metal case
- solder plated J-leads for good solderability and strain relief
- aqueous washable

Applications

- CATV
- cellular

Electrical Specifications

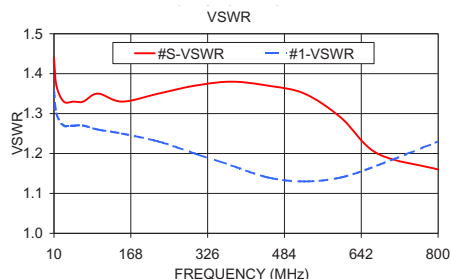
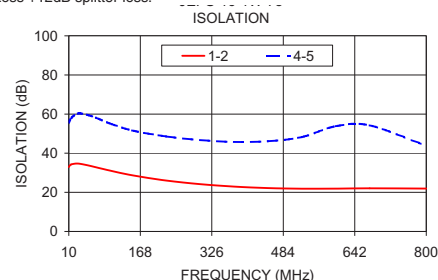
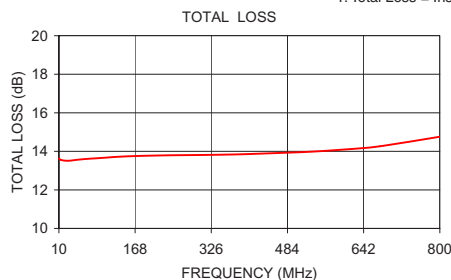
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 12 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)			VSWR (:1)	
	L		M		U		L		M		U		L	M	U	L	M	U	S	OUT
	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.	Typ.	Typ.
f _c -f _u	32	20	23	15	20	15	1.6	3.5	1.9	3.5	2.2	4.0	10	15	30	0.8	1.2	2.1	1.4	1.16

L = 10-100 MHz M = 100-400 MHz U = 400-800 MHz

Typical Performance Data

Freq. (MHz)	Total Loss ¹ (dB)	Amplitude Unbalance (dB)	Isolation (dB)		Phase Unbalance (deg.)	VSWR S	VSWR 1
			1-2	4-5			
10.00	13.63	0.08	32.93	55.57	0.52	1.44	1.36
15.00	13.55	0.08	34.22	57.85	0.60	1.37	1.30
30.00	13.51	0.06	34.73	60.25	0.94	1.33	1.27
50.00	13.57	0.05	33.92	59.62	1.41	1.33	1.27
70.00	13.61	0.07	32.84	58.13	1.94	1.33	1.27
100.00	13.66	0.10	31.16	55.29	2.77	1.35	1.26
150.00	13.74	0.19	28.73	51.63	3.96	1.33	1.25
225.00	13.79	0.41	26.04	48.57	5.29	1.35	1.23
300.00	13.81	0.64	24.20	46.71	6.25	1.37	1.20
375.00	13.84	0.85	22.95	45.76	7.94	1.38	1.17
450.00	13.90	0.95	22.19	46.13	9.85	1.37	1.14
525.00	13.97	0.90	21.86	48.25	12.00	1.35	1.13
600.00	14.09	0.69	21.88	53.79	14.17	1.29	1.14
675.00	14.26	0.60	22.07	54.24	16.42	1.20	1.17
800.00	14.76	1.12	21.92	43.86	20.72	1.16	1.23

1. Total Loss = Insertion Loss + 12dB splitter loss.



electrical schematic



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M151107
ED-6349/1
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HY/TD/CP/AM
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