

Surface Mount Power Splitter/Combiner

JCPS-8-850-75+ JCPS-8-850-75

8 Way-0° 75Ω 10 to 850 MHz



Maximum Ratings

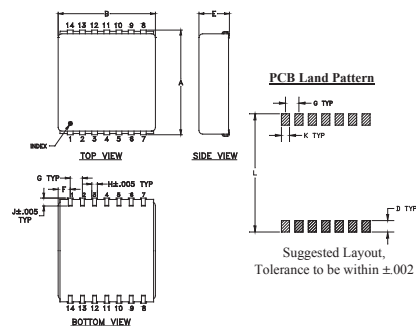
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.875W max.

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

Pin Connections

SUM PORT	1
PORT 1	3
PORT 2	4
PORT 3	5
PORT 4	6
PORT 5	9
PORT 6	10
PORT 7	11
PORT 8	12
GROUND	2,7,8,13,14

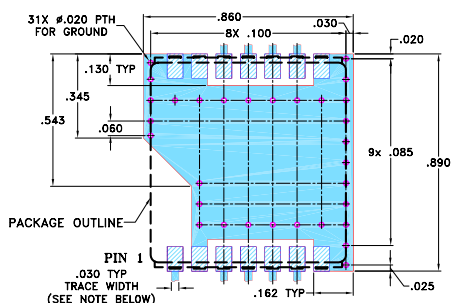
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.870	.800	--	.100	.250	.100	.100
22.10	20.32	--	2.54	6.35	2.54	2.54
H	J	K	L			wt
.047	.065	.065	.890			grams
1.19	1.65	1.65	22.61			4.0

Demo Board MCL P/N: TB-136 Suggested PCB Layout (PL-074)



- 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, 10 to 850 MHz
- aqueous washable
- shielded metal case
- J-leads for good solderability & strain relief
- good isolation, 25 dB typ.

Applications

- VHF/UHF
- CATV
- instrumentation
- cellular

Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)			INSERTION LOSS (dB) ABOVE 9.0 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.
10-850	34	20	25	15	20	15	0.7	1.5	1.0	2.0	1.8	3.0

L = low range [f_L to $10 f_L$] M = mid range [$10 f_L$ to $f_U/2$] U = upper range [$f_U/2$ to f_U]

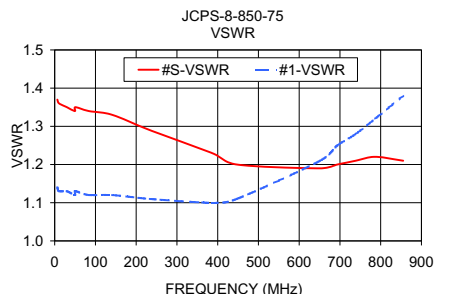
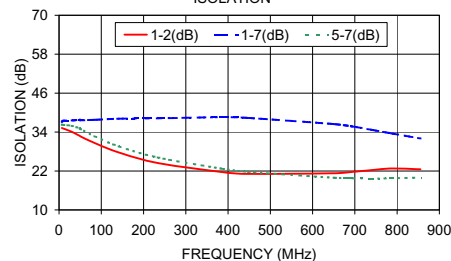
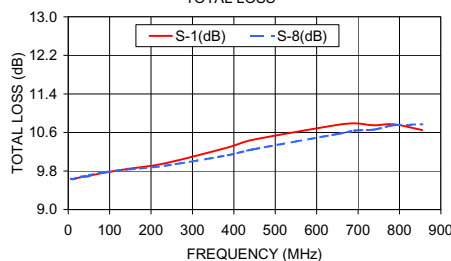
Typical Performance Data

Freq. (MHz)	Total Loss ¹ (dB)						Amplitude Unbalance (dB)	Isolation (dB)				VSWR S	VSWR 1	VSWR 8
	S-1	S-2	S-3	S-4	S-6	S-8		1-2	1-7	3-4	5-7			
6.51	9.64	9.65	9.65	9.65	9.64	9.64	0.01	35.25	37.15	36.09	36.31	1.37	1.14	1.19
10.76	9.63	9.64	9.65	9.64	9.63	9.63	0.02	35.05	37.50	35.94	36.20	1.36	1.13	1.18
30.01	9.67	9.66	9.67	9.68	9.66	9.68	0.02	34.07	37.58	34.88	35.91	1.35	1.13	1.17
49.61	9.69	9.70	9.70	9.70	9.71	9.70	0.02	32.79	37.77	33.27	35.11	1.34	1.12	1.17
50.66	9.70	9.72	9.71	9.70	9.69	9.71	0.02	32.66	37.63	33.21	34.96	1.35	1.13	1.17
83.73	9.76	9.78	9.76	9.77	9.76	9.77	0.02	30.66	37.77	30.72	32.73	1.34	1.12	1.16
141.31	9.84	9.82	9.83	9.82	9.81	9.83	0.03	27.71	38.12	27.27	29.61	1.33	1.12	1.15
233.55	9.96	9.94	9.93	9.90	9.91	9.91	0.06	24.47	38.25	23.80	26.17	1.29	1.11	1.12
386.01	10.29	10.23	10.17	10.14	10.10	10.13	0.20	21.66	38.59	20.71	22.71	1.23	1.10	1.09
446.93	10.45	10.36	10.28	10.26	10.22	10.25	0.24	21.10	38.35	20.02	21.74	1.20	1.11	1.09
651.48	10.76	10.66	10.51	10.55	10.51	10.57	0.27	21.31	36.46	19.89	19.90	1.19	1.21	1.19
693.71	10.79	10.70	10.54	10.60	10.56	10.64	0.26	21.71	35.75	20.30	19.77	1.20	1.25	1.22
738.68	10.75	10.71	10.53	10.63	10.59	10.66	0.22	22.27	34.72	20.90	19.66	1.21	1.28	1.25
786.56	10.77	10.75	10.56	10.68	10.68	10.75	0.22	22.78	33.58	21.79	19.75	1.22	1.32	1.29
855.26	10.65	10.71	10.50	10.70	10.70	10.77	0.36	22.52	32.02	22.87	19.96	1.21	1.38	1.34

JCPS-8-850-75

1. Total Loss = Insertion Loss + 9dB splitter loss.

JCPS-8-850-75



electrical schematic



For detailed performance specs & shopping online see web site

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