

Power Splitter/Combiner

JCPS-6-3

6 Way-0° 50Ω 75 to 425 MHz

Maximum Ratings

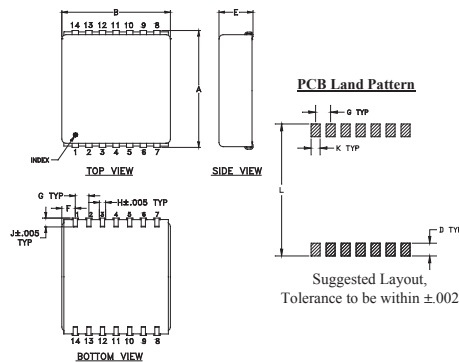
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	0.25W max.
Internal Dissipation	0.5W max.

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

Pin Connections

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

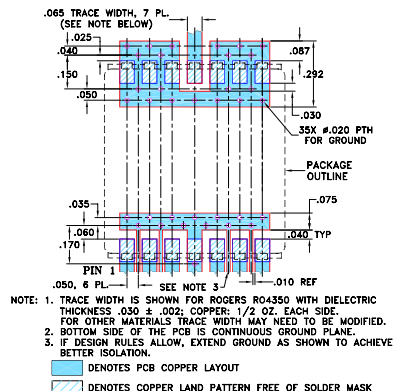
Outline Drawing



Outline Dimensions ()

A	B	C	D	E	in	in	G
.870	.800	--	.100	.250	.700	.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	grams			4.0

Demo Board MCL P/N: TB-234 Suggested PCB Layout (PL-139)



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, 75 to 425 MHz
- good isolation, 23 dB typ.
- excellent amplitude unbalance, 0.1 dB typ.
- good phase unbalance, 2 deg. typ.
- excellent insertion loss flatness, 0.15 dB typ.
- aqueous washable, shielded metal case
- J-leads for good solderability & strain relief

Applications

- VHF receivers
- instrumentation



Generic photo used for illustration purposes only
CASE STYLE: BG291

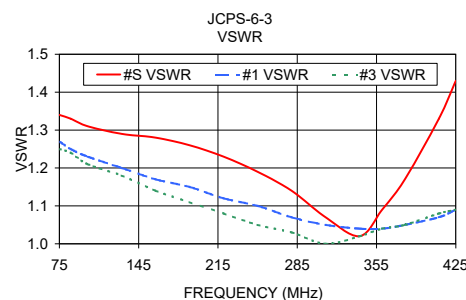
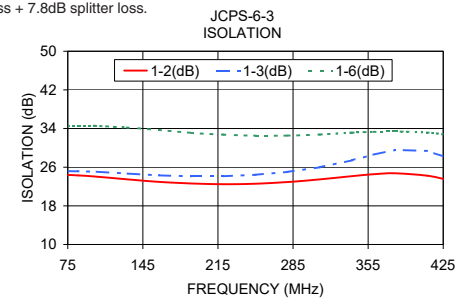
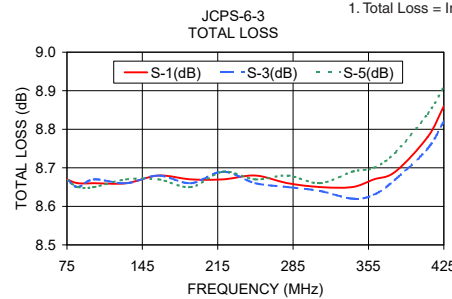
Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)	INSERTION LOSS (dB) ABOVE 7.8 dB	PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
f_L - f_U	Typ. Min.	Typ. Max.	Max.	Max.
75-425	23 18	0.9 1.8	9	0.7

Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)			Amplitude Unbalance (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 3
	S-1	S-3	S-5		1-2	1-3	1-6				
75.00	8.67	8.67	8.67	0.01	24.41	25.17	34.51	0.37	1.34	1.27	1.25
85.00	8.66	8.65	8.65	0.02	24.29	25.15	34.60	0.29	1.33	1.25	1.24
100.00	8.66	8.67	8.65	0.02	24.08	25.07	34.55	0.59	1.31	1.23	1.21
130.00	8.66	8.66	8.67	0.01	23.50	24.70	34.21	0.59	1.29	1.20	1.18
160.00	8.68	8.68	8.67	0.02	22.96	24.31	33.71	0.70	1.28	1.17	1.14
190.00	8.67	8.66	8.65	0.03	22.62	24.11	33.11	0.66	1.26	1.15	1.11
220.00	8.67	8.69	8.69	0.02	22.48	24.13	32.74	0.89	1.23	1.12	1.08
250.00	8.68	8.66	8.67	0.05	22.58	24.42	32.52	1.02	1.19	1.10	1.05
280.00	8.66	8.65	8.68	0.05	22.92	25.03	32.54	1.11	1.14	1.07	1.03
310.00	8.65	8.64	8.66	0.07	23.48	26.00	32.75	1.22	1.07	1.05	1.00
340.00	8.65	8.62	8.69	0.09	24.14	27.44	33.15	1.34	1.02	1.04	1.02
360.00	8.67	8.63	8.70	0.11	24.54	28.59	33.30	1.47	1.09	1.04	1.04
380.00	8.69	8.67	8.74	0.11	24.74	29.57	33.39	1.45	1.17	1.05	1.05
410.00	8.78	8.75	8.84	0.11	24.24	29.38	33.18	1.58	1.33	1.07	1.08
425.00	8.86	8.82	8.91	0.12	23.57	28.23	32.80	1.63	1.43	1.09	1.09

1. Total Loss = Insertion Loss + 7.8dB splitter loss.



electrical schematic

