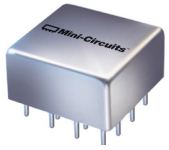
Plug-In

Power Splitter/Combiner

PSC-8-1+

8 Way-0° 50Ω 0.5 to 175 MHz



CASE STYLE: C07
PRICE: $80.45 ea. QTY. (1-9)

Maximum Ratings

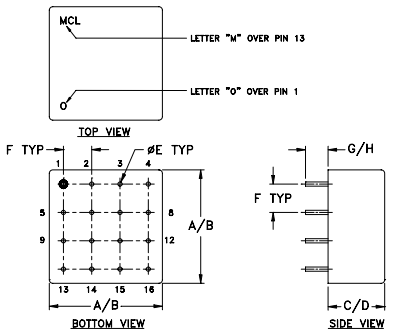
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.62W max.

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

Pin Connections

SUM PORT	2
PORT 1	1
PORT 2	5
PORT 3	9
PORT 4	13
PORT 5	16
PORT 6	12
PORT 7	8
PORT 8	4
GROUND	3,6,7,14,15
CASE GROUND	3,6,7,14,15
NOT USED	10,11

Outline Drawing



Outline Dimensions (inch / mm)

A	B	C	D	E	F	G	H	wt
.770	.810	.380	.410	.030	.200	.20	.14	grams
19.56	20.57	9.65	10.41	0.76	5.08	5.08	3.56	11.0

Features

- low insertion loss, 0.8 dB typ.
- high isolation, 30 dB typ.
- excellent amplitude unbalance, 0.3 dB typ.
- rugged welded construction

Applications

- VHF
- radio communications
- instrumentation

+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 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.	Max.	Max.	Max.	Max.	Max.	Max.
0.5-175	30	25	30	20	25	18	0.8	1.2	0.8	1.2	1.0	1.6	1.0	2.5	5.0	0.2	0.3	0.5

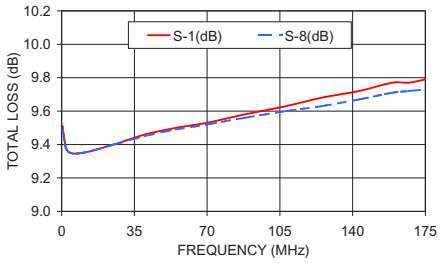
L = low range [f_L to 10 f_L] M = mid range [10 f_L to f_U/2] U = upper range [f_U/2 to f_U]

Typical Performance Data

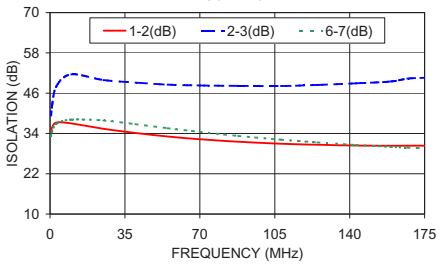
Freq. (MHz)	Total Loss[1] (dB)						Amplitude Unbalance (dB)	Isolation (dB)				VSWR S	VSWR 1	VSWR 8
	S-1	S-2	S-3	S-4	S-6	S-8		1-2	2-3	5-8	6-7			
0.50	9.51	9.51	9.51	9.51	9.49	9.49	0.03	34.29	39.36	34.19	33.21	1.17	1.27	1.26
0.90	9.47	9.47	9.48	9.47	9.46	9.45	0.02	35.71	42.12	35.35	34.56	1.11	1.20	1.19
3.00	9.36	9.36	9.36	9.37	9.36	9.36	0.01	37.26	48.13	37.32	36.91	1.06	1.12	1.11
10.00	9.35	9.35	9.35	9.35	9.35	9.35	0.01	36.99	51.60	36.91	38.12	1.06	1.08	1.09
25.00	9.40	9.40	9.40	9.41	9.40	9.40	0.01	35.40	49.92	34.99	37.86	1.07	1.08	1.08
40.00	9.46	9.46	9.45	9.45	9.45	9.45	0.01	34.15	49.14	33.64	36.78	1.08	1.07	1.08
55.00	9.50	9.50	9.50	9.49	9.50	9.49	0.01	33.10	48.55	32.46	35.55	1.09	1.07	1.07
70.00	9.53	9.54	9.53	9.52	9.52	9.52	0.02	32.29	48.29	31.57	34.48	1.09	1.07	1.07
88.00	9.58	9.58	9.57	9.56	9.57	9.56	0.03	31.55	48.18	30.65	33.26	1.09	1.07	1.07
108.00	9.63	9.63	9.61	9.60	9.61	9.60	0.04	30.94	48.12	29.97	32.15	1.10	1.07	1.07
125.00	9.68	9.67	9.65	9.64	9.65	9.63	0.05	30.63	48.46	29.55	31.34	1.10	1.07	1.07
143.00	9.72	9.72	9.69	9.67	9.69	9.67	0.05	30.41	48.94	29.29	30.56	1.10	1.08	1.07
159.00	9.77	9.76	9.73	9.70	9.73	9.71	0.07	30.34	49.48	29.19	30.05	1.10	1.09	1.08
167.00	9.77	9.77	9.74	9.71	9.74	9.72	0.07	30.36	50.33	29.19	29.77	1.10	1.10	1.09
175.00	9.79	9.79	9.76	9.72	9.77	9.73	0.07	30.36	50.58	29.22	29.59	1.10	1.11	1.09

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

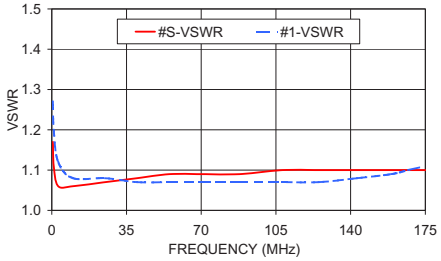
PSC-8-1+
TOTAL LOSS



PSC-8-1+
ISOLATION



PSC-8-1+
VSWR



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