

Plug-In

# NON-CATALOG

# Power Splitter/Combiner

## PSC-8-1+

8 Way-0° 50Ω 0.5 to 175 MHz



CASE STYLE: C07

### Maximum Ratings

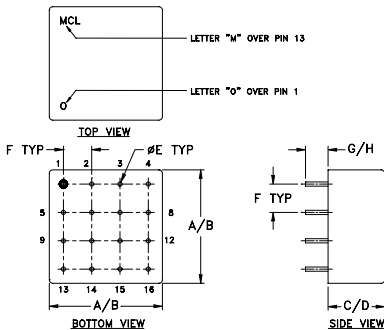
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.62W max.

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
								grams
.770	.810	.380	.410	.030	.200	.20	.14	11.0
19.56	20.57	9.65	10.41	0.76	5.08	5.08	3.56	

### 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

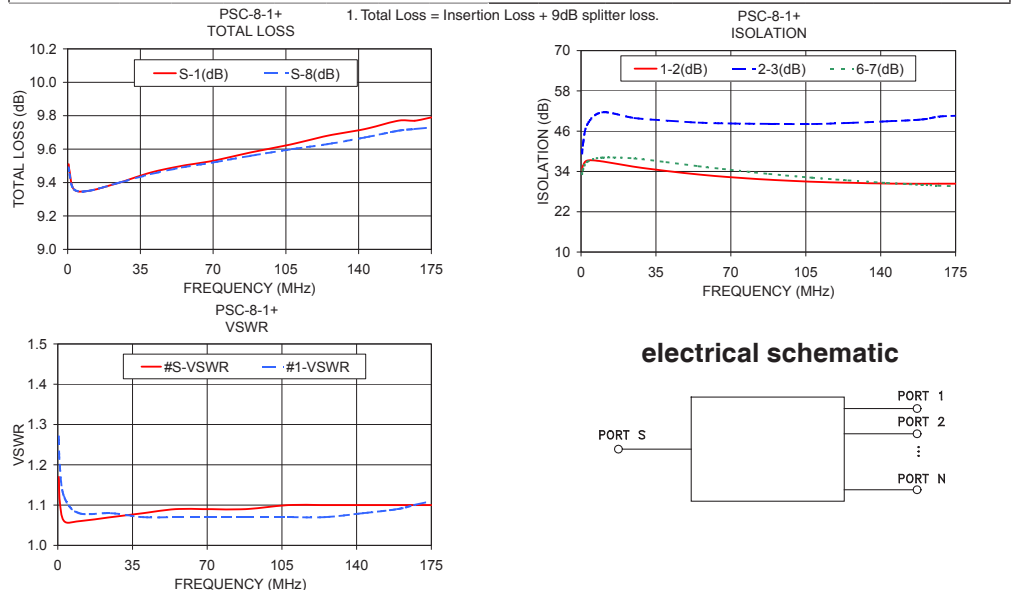
### Electrical Specifications

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
	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
$f_L$ - $f_U$	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 <sup>1</sup> (dB)						Amplitude Unbalance (dB)				Isolation (dB)				VSWR		
	S-1	S-2	S-3	S-4	S-6	S-8	1-2	2-3	5-8	6-7	S	1	8	S	1	8	
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			



### Notes

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