

Plug-In

# Power Splitter/Combiner

PSC-8-1-75+

8 Way-0° 75Ω 0.5 to 175 MHz

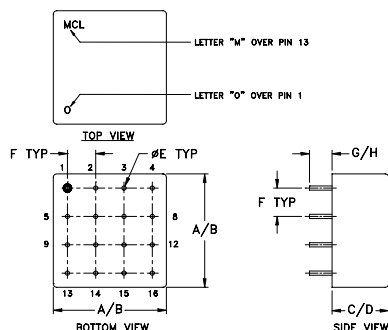
## Maximum Ratings

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, 0.6 dB typ.
- high isolation, 30 dB typ.
- rugged welded construction

## Applications

- HF/VHF
- radio communication
- instrumentation



CASE STYLE: C07  
PRICE: \$84.45 ea. QTY. (1-9)

## +RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

## Electrical Specifications

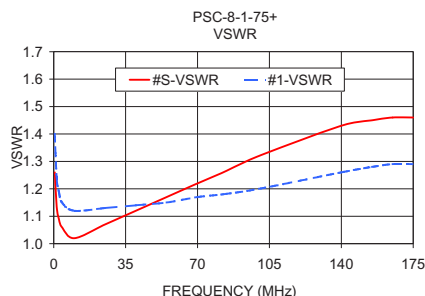
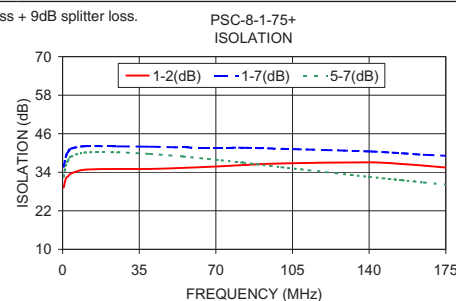
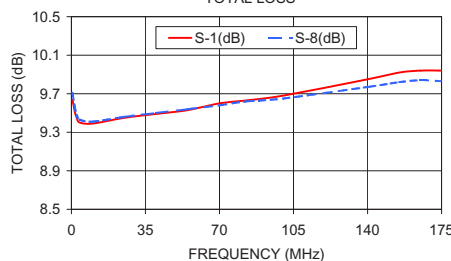
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 9.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L			L		
	Typ.	Min	Typ.	Min	Typ.	Min	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
f <sub>L</sub> -f <sub>U</sub>																		
0.5-175	25	20	30	20	25	20	0.5	1.1	0.6	1.1	0.7	1.3	2.0	2.5	5.0	0.2	0.2	0.3

L = low range [f<sub>L</sub> to 10 f<sub>L</sub>] M = mid range [10 f<sub>L</sub> to f<sub>U</sub>/2] U = upper range [f<sub>U</sub>/2 to f<sub>U</sub>]

## 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	1-7	3-4	5-7	S	1	8
0.50	9.64	9.64	9.64	9.65	9.69	9.71	0.06	29.22	35.73	31.36	32.59	1.26	1.40	1.37
1.50	9.52	9.53	9.53	9.53	9.56	9.57	0.05	32.08	38.90	33.69	36.03	1.13	1.23	1.22
2.50	9.45	9.45	9.45	9.45	9.47	9.48	0.04	32.73	40.32	34.47	37.69	1.09	1.19	1.18
4.00	9.40	9.40	9.40	9.41	9.42	9.43	0.03	33.64	41.35	34.79	38.90	1.06	1.15	1.15
10.00	9.39	9.40	9.40	9.40	9.40	9.41	0.02	34.80	42.11	34.83	40.12	1.02	1.12	1.12
25.00	9.45	9.45	9.45	9.45	9.45	9.46	0.01	35.01	42.05	34.60	40.22	1.07	1.13	1.13
40.00	9.49	9.50	9.49	9.49	9.48	9.50	0.02	35.05	41.95	34.63	39.72	1.12	1.14	1.14
55.00	9.53	9.54	9.52	9.52	9.52	9.54	0.02	35.38	41.73	34.99	38.91	1.17	1.15	1.15
70.00	9.60	9.59	9.58	9.58	9.57	9.58	0.03	35.80	41.72	35.38	37.90	1.22	1.17	1.16
82.50	9.63	9.63	9.61	9.60	9.59	9.62	0.04	36.23	41.63	35.84	36.98	1.26	1.18	1.18
100.00	9.68	9.67	9.65	9.64	9.62	9.65	0.06	36.75	41.32	36.45	35.57	1.32	1.20	1.20
140.00	9.85	9.82	9.79	9.76	9.75	9.77	0.11	37.08	40.49	37.91	32.56	1.43	1.26	1.24
155.00	9.92	9.89	9.86	9.83	9.81	9.82	0.12	36.56	39.92	38.10	31.52	1.45	1.28	1.25
165.00	9.94	9.91	9.87	9.84	9.82	9.84	0.15	36.07	39.45	37.92	30.82	1.46	1.29	1.26
175.00	9.94	9.91	9.87	9.83	9.82	9.83	0.15	35.47	39.13	37.68	30.17	1.46	1.29	1.26

PSC-8-1-75+ TOTAL LOSS  
1. Total Loss = Insertion Loss + 9dB splitter loss.



## electrical schematic



## 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.
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