

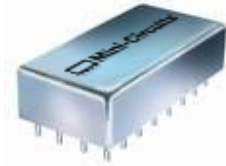
Plug-In

# Power Splitter/Combiner

NON-CATALOG

**PSC-8A4-75+**  
**PSC-8A4-75**

8 Way-0° 75Ω 1 to 300 MHz



CASE STYLE: E10  
PRICE: Contact Sales Dept.

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

## 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	29
PORT 1	7
PORT 2	16
PORT 3	31
PORT 4	24
PORT 5	9
PORT 6	2
PORT 7	26
PORT 8	17
GROUND	all other pins
CASE GROUND	all other pins
NOT USED	15

## Features

- wideband, 1 to 300 MHz
- low insertion loss, 0.7 dB typ.
- high isolation, 30 dB typ.
- rugged welded construction

## Applications

- VHF
- radio communications

## 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 <sub>c</sub> -f <sub>u</sub>																		
1-300	26	20	30	25	30	23	0.8	1.2	0.7	1.1	0.9	1.3	1.0	3.0	8.0	0.2	0.2	0.4

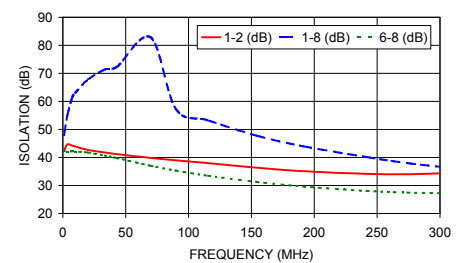
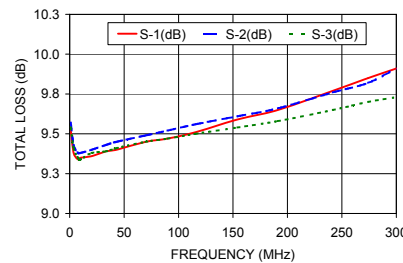
L = low range [f<sub>c</sub> to 10 f<sub>c</sub>] M = mid range [10 f<sub>c</sub> to f<sub>u</sub>/2] U = upper range [f<sub>u</sub>/2 to f<sub>u</sub>]

## Typical Performance Data

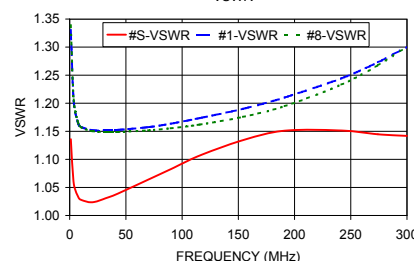
Freq. (MHz)	Total Loss <sup>1</sup> (dB)						Amplitude Unbalance (dB)	Isolation (dB)				VSWR S	VSWR 1	VSWR 8
	S-1	S-2	S-3	S-4	S-6	S-8		1-2	1-8	3-4	6-7			
1.00	9.53	9.52	9.55	9.57	9.62	9.54	0.10	42.40	47.98	44.69	42.50	1.14	1.33	1.34
3.59	9.39	9.38	9.40	9.43	9.49	9.41	0.11	44.64	54.88	43.02	41.99	1.06	1.20	1.21
7.51	9.34	9.34	9.36	9.38	9.43	9.35	0.10	44.20	61.45	42.82	42.14	1.03	1.16	1.16
10.01	9.34	9.35	9.37	9.38	9.44	9.34	0.10	43.91	63.09	42.65	42.10	1.03	1.16	1.16
20.19	9.37	9.36	9.38	9.40	9.45	9.38	0.10	42.65	67.84	41.93	41.74	1.02	1.15	1.15
33.42	9.39	9.39	9.41	9.43	9.47	9.39	0.08	41.77	71.36	41.19	40.67	1.03	1.15	1.15
42.99	9.41	9.40	9.42	9.45	9.48	9.41	0.08	41.17	72.32	40.46	39.78	1.04	1.15	1.15
69.86	9.46	9.45	9.46	9.49	9.51	9.45	0.07	39.84	82.83	39.02	37.04	1.06	1.16	1.15
89.87	9.48	9.47	9.49	9.52	9.54	9.47	0.07	38.96	87.31	38.05	35.31	1.08	1.16	1.16
115.61	9.52	9.51	9.53	9.56	9.57	9.50	0.08	37.97	83.24	36.83	33.47	1.11	1.17	1.16
154.17	9.58	9.59	9.59	9.61	9.61	9.54	0.08	36.33	47.78	35.26	31.25	1.13	1.19	1.18
191.32	9.65	9.65	9.66	9.66	9.65	9.58	0.08	35.08	43.98	33.97	29.61	1.15	1.21	1.19
241.72	9.75	9.77	9.75	9.76	9.70	9.65	0.12	34.13	40.12	32.92	28.05	1.15	1.24	1.23
274.16	9.81	9.85	9.82	9.82	9.74	9.70	0.18	34.01	37.96	32.70	27.45	1.14	1.27	1.27
300.00	9.98	9.91	9.88	9.91	9.79	9.73	0.18	34.34	36.66	32.62	27.28	1.14	1.30	1.30

PSC-8A4-75 1. Total Loss = Insertion Loss + 9dB splitter loss.

PSC-8A4-75 ISOLATION



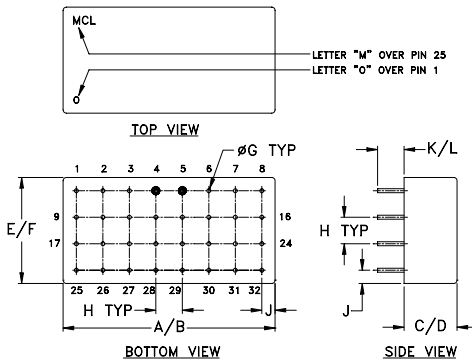
PSC-8A4-75 VSWR



## electrical schematic



## Outline Drawing



## Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	
1.580	1.620	.380	.410	.770	.810	.030	
40.13	41.15	9.65	10.41	19.56	20.57	0.76	
H	J	K	L				wt
.200	.10	.20	.14				grams
5.08	2.54	5.08	3.56				23.0

**Mini-Circuits®**  
ISO 9001 ISO 14001 AS 9100 CERTIFIED

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

IFIRF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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](http://www.minicircuits.com/MCLStore/terms.jsp).

REV. B  
M127604  
PSC-8A4-75  
HY/TD/CP/AM  
13025