

8 Way-0° 75Ω 0.5 to 400 MHz

Maximum Ratings

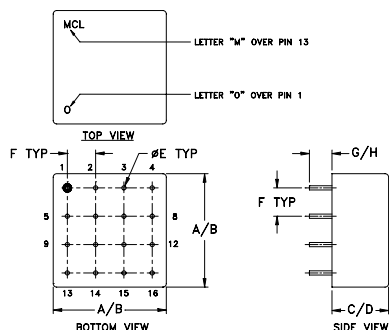
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.62W max.

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, 1.0 dB typ.
- high isolation, 25 dB typ.
- rugged welded construction
- excellent amplitude unbalance, 0.5dB typ.

Applications

- HF/VHF
- radio communication
- instrumentation

CASE STYLE: C07

Units marked as PSC-8-1-75+

+RoHS Compliant

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

Electrical Specifications at 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency Range		.5		400	MHz
Insertion Loss (above theoretical 9.0 dB)	0.5-5	—	0.9	1.2	dB
	5-100	—	0.6	1.0	
	100-250	—	1.1	1.5	
	250-400	—	1.5	2.3	
Isolation	0.5-200	25	30	—	dB
	200-300	20	25	—	
	300-400	18	22	—	
Phase Unbalance	0.5-100	—	1.5	2.5	Degree
	100-200	—	2.5	4.0	
	200-400	—	5	12	
Amplitude Unbalance	0.5-200	—	0.1	0.3	dB
	200-400	—	0.5	1.0	
VSWR (Port S)	0.5-100	—	1.30	—	:1
	100-200	—	1.40	—	
	200-400	—	1.50	—	
VSWR (Port 1-8)	0.5-5	—	1.40	—	:1
	5-200	—	1.30	—	
	200-400	—	1.50	—	

Electrical Schematic



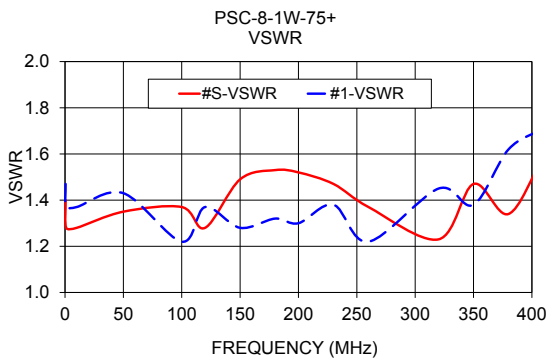
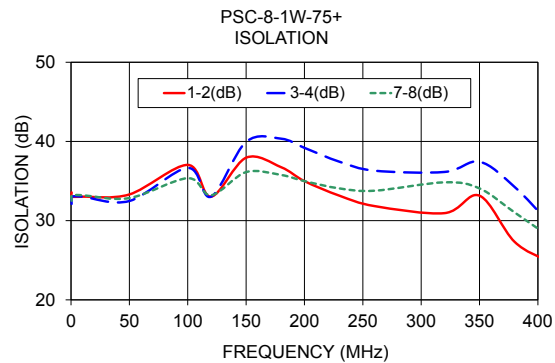
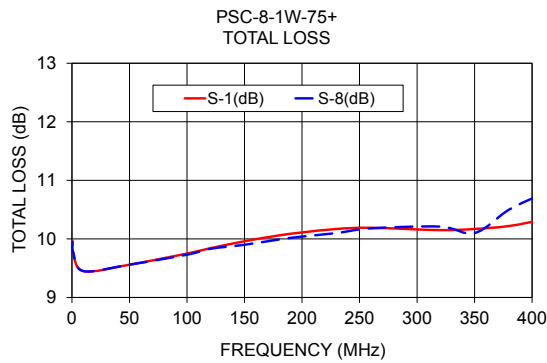
Notes

- 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.
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Typical Performance Data

Freq. (MHz)	Insertion Loss (dB)						Amplitude Unbalance (dB)	Isolation (dB)				Phase Unbalance (deg.)	S	VSWR	
	S-1	S-2	S-3	S-4	S-6	S-8		1-2	2-3	3-4	5-6			1	8
0.50	9.97	9.98	9.97	9.97	9.95	9.95	0.03	33.57	32.11	31.84	32.51	0.66	1.40	1.47	1.46
1.00	9.78	9.78	9.78	9.78	9.77	9.77	0.01	33.03	33.03	32.77	33.21	0.43	1.28	1.37	1.36
10.00	9.45	9.45	9.45	9.45	9.45	9.45	0.01	33.03	33.03	32.77	33.21	0.43	1.28	1.37	1.36
50.00	9.56	9.56	9.55	9.55	9.55	9.56	0.02	33.31	32.48	32.25	32.85	0.56	1.35	1.43	1.41
100.00	9.75	9.74	9.71	9.71	9.71	9.73	0.06	37.04	36.66	36.78	35.36	1.41	1.37	1.22	1.24
120.00	9.84	9.84	9.84	9.83	9.82	9.83	0.01	33.03	33.03	32.77	33.21	0.43	1.28	1.37	1.36
150.00	9.96	9.93	9.89	9.87	9.87	9.90	0.11	37.95	39.95	39.59	36.13	1.93	1.49	1.28	1.30
180.00	10.06	10.02	9.97	9.94	9.95	9.99	0.14	36.75	40.35	39.15	35.77	2.36	1.53	1.32	1.34
200.00	10.11	10.08	10.01	9.98	9.99	10.04	0.16	34.99	39.19	37.62	34.99	2.63	1.52	1.30	1.32
230.00	10.17	10.14	10.07	10.02	10.05	10.10	0.17	33.15	37.44	35.65	34.07	3.00	1.47	1.38	1.40
260.00	10.19	10.18	10.11	10.05	10.12	10.18	0.15	31.84	36.31	34.98	33.78	3.21	1.37	1.22	1.24
320.00	10.15	10.20	10.18	10.09	10.17	10.21	0.19	30.95	36.15	35.20	34.84	3.18	1.23	1.45	1.47
350.00	10.17	10.14	10.07	10.02	10.05	10.10	0.17	33.15	37.44	35.65	34.07	3.00	1.47	1.38	1.40
380.00	10.22	10.39	10.52	10.40	10.47	10.50	0.35	27.33	34.26	34.21	31.04	4.96	1.34	1.62	1.66
410.00	10.33	10.57	10.82	10.69	10.77	10.78	0.55	24.74	29.67	30.24	27.97	5.36	1.59	1.71	1.76



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