

Plug-In

# NON-CATALOG

# Power Splitter/Combiner

## PSC-9-1+

9 Way-0° 50Ω 2 to 300 MHz



CASE STYLE: C07

### Maximum Ratings

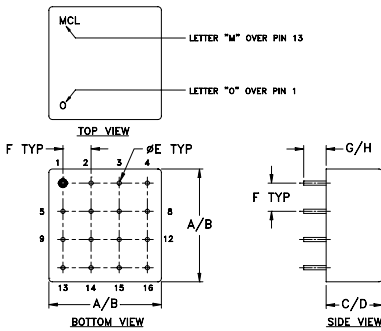
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	0.5W max.
Internal Dissipation	1.5W max.

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

### Pin Connections

SUM PORT	1
PORT 1	9
PORT 2	13
PORT 3	14
PORT 4	15
PORT 5	16
PORT 6	12
PORT 7	8
PORT 8	4
PORT 9	3
GROUND	2,5,6,7,10,11
CASE GROUND	2,5,7,10,11

### 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, 0.9 dB typ.
- high isolation, 26 dB typ.
- rugged welded construction

### Applications

- VHF
- radio communication
- instrumentation

### Electrical Specifications

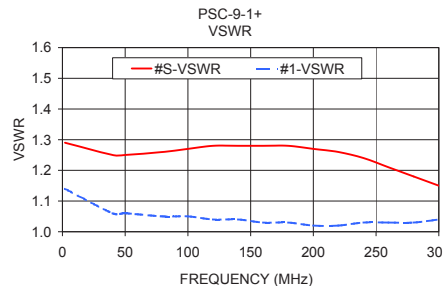
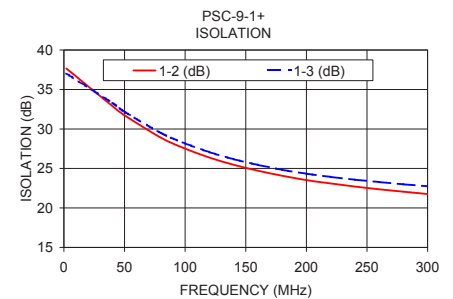
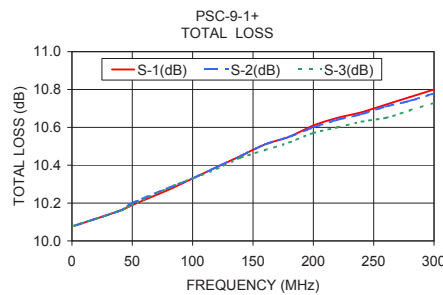
FREQ. RANGE (MHz)	ISOLATION (dB)			INSERTION LOSS (dB) ABOVE 9.6 dB			PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)								
	L	M	U	L	M	U	L	M	U	L	M	U						
$f_L$ - $f_U$	Typ.	Min.	Typ. Min.	Typ. Min.	Typ. Max.	Typ. Max.	Typ. Max.	Max.	Max.	Max.	Max.	Max.						
2-300	38	25	26	20	22	15	0.6	1.1	0.9	1.4	1.5	2.0	2.0	5.0	10.0	0.2	0.3	0.8

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)		Phase unbalance (deg.)	VSWR S	VSWR 1	VSWR 3
	S-1	S-2	S-3		1-2	1-3				
2.00	10.08	10.08	10.08	0.01	37.67	37.03	0.08	1.29	1.14	1.13
40.00	10.16	10.16	10.16	0.01	32.90	33.29	0.33	1.25	1.06	1.06
50.00	10.19	10.20	10.19	0.02	31.73	32.17	0.46	1.25	1.06	1.06
80.00	10.27	10.28	10.28	0.02	28.90	29.50	0.73	1.26	1.05	1.05
100.00	10.33	10.33	10.33	0.02	27.51	28.17	0.92	1.27	1.05	1.04
120.00	10.39	10.39	10.38	0.03	26.38	27.07	1.04	1.28	1.04	1.04
140.00	10.45	10.45	10.44	0.03	25.47	26.18	1.37	1.28	1.04	1.03
160.00	10.51	10.51	10.48	0.05	24.72	25.46	1.45	1.28	1.03	1.02
180.00	10.55	10.55	10.52	0.06	24.08	24.83	1.68	1.28	1.03	1.01
200.00	10.61	10.60	10.57	0.08	23.53	24.33	1.84	1.27	1.02	1.01
220.00	10.65	10.64	10.60	0.08	23.10	23.93	1.98	1.26	1.02	1.01
240.00	10.68	10.67	10.63	0.12	22.71	23.58	2.05	1.24	1.03	1.02
260.00	10.72	10.71	10.65	0.13	22.37	23.28	2.22	1.21	1.03	1.02
280.00	10.76	10.74	10.69	0.15	22.06	23.00	2.32	1.18	1.03	1.03
300.00	10.80	10.78	10.73	0.18	21.76	22.75	2.44	1.15	1.04	1.04

1. Total Loss = Insertion Loss + 9.6dB 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.
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