

Plug-In

# Power Splitter/Combiner

**PSC-10-1+**  
**PSC-10-1**

10 Way-0° 50Ω 1 to 150 MHz



CASE STYLE: E10

**+RoHS Compliant**

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

## Maximum Ratings

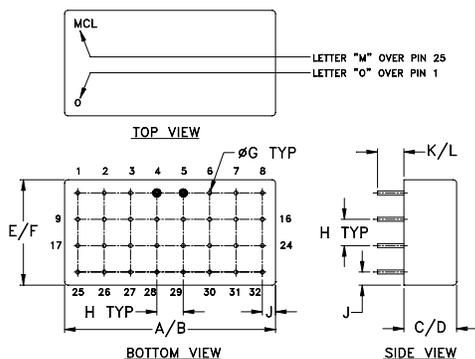
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.87W max.

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
PORT 9	4
PORT 10	5
GROUND	all other pins
CASE GROUND	all other pins
NOT USED	15

## 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		

## Features

- low insertion loss, 0.4 dB typ.
- good isolation, 27 dB typ.
- excellent amplitude unbalance, 0.3 dB typ.
- rugged welded case

## Applications

- HF/VHF
- amateur radio
- FM broadcasting

## Electrical Specifications

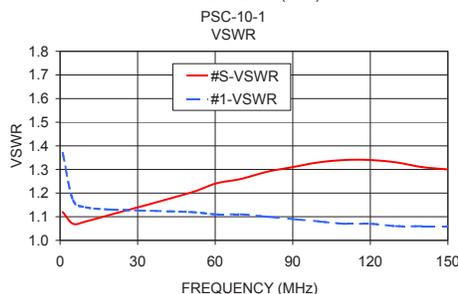
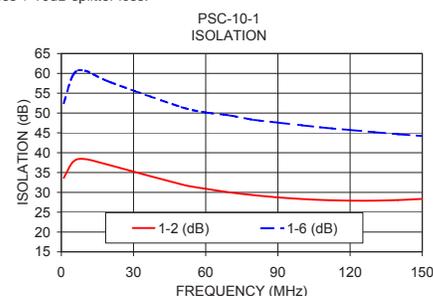
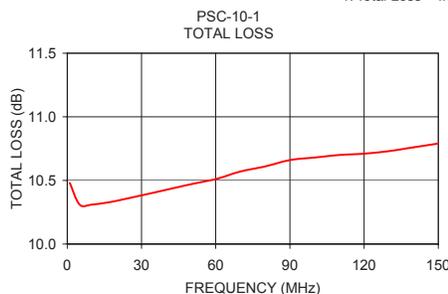
FREQ. RANGE (MHz)	ISOLATION (dB)			INSERTION LOSS (dB) ABOVE 10 dB			PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)								
	L	M	U	L	M	U	L	M	U	L	M	U						
$f_L$ - $f_U$	Typ.	Min.	Typ. Min.	Typ. Min.	Typ. Max.	Typ. Max.	Typ. Max.	Max.	Max.	Max.	Max.	Max.						
1-150	36	23	27	23	23	18	0.3	0.6	0.4	0.8	1.0	1.3	3	6	10	0.2	0.3	0.4

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  $f_U$ ]

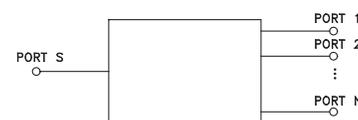
## Typical Performance Data

Freq. (MHz)	Total Loss <sup>1</sup> (dB)	Amplitude Unbalance (dB)	Isolation (dB)		Phase Unbalance (deg.)	VSWR S	VSWR 1
			1-2	1-6			
1.00	10.48	0.04	33.61	52.48	0.24	1.12	1.37
5.00	10.31	0.04	37.77	59.69	0.40	1.07	1.17
10.00	10.31	0.03	38.38	60.63	0.67	1.08	1.14
20.00	10.34	0.03	36.88	57.86	1.29	1.11	1.13
50.00	10.47	0.06	31.99	51.48	3.16	1.20	1.12
60.00	10.51	0.08	30.90	50.14	3.76	1.24	1.11
70.00	10.57	0.08	29.99	49.39	4.32	1.26	1.11
80.00	10.61	0.09	29.29	48.27	4.93	1.29	1.10
90.00	10.66	0.10	28.72	47.59	5.42	1.31	1.09
100.00	10.68	0.13	28.31	46.91	6.06	1.33	1.08
110.00	10.70	0.13	28.05	46.24	6.58	1.34	1.07
120.00	10.71	0.14	27.91	45.72	7.11	1.34	1.07
130.00	10.73	0.16	27.91	45.17	7.57	1.33	1.06
140.00	10.76	0.17	28.06	44.65	8.11	1.31	1.06
150.00	10.79	0.20	28.36	44.21	8.72	1.30	1.06

1. Total Loss = Insertion Loss + 10dB 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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