

Plug-In

# Power Splitter/Combiner

## PSC-2-2+

2 Way-0° 50Ω 0.004 to 60 MHz



Generic photo used for illustration purposes only

CASE STYLE: A01

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

### Maximum Ratings

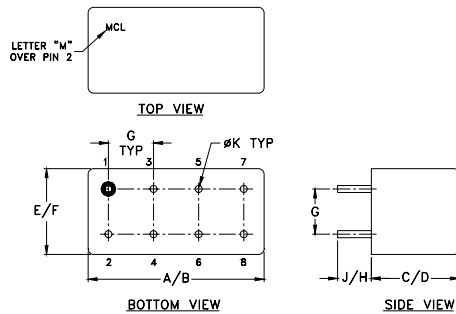
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.125W max.

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

### Pin Connections

SUM PORT	1
PORT 1	5
PORT 2	6
GROUND	2,3,4,7,8
CASE GROUND	2,3,4,7,8

### Outline Drawing



### Outline Dimensions (inch)

A	B	C	D	E	F
.770	.800	.385	.400	.370	.400
19.56	20.32	9.78	10.16	9.40	10.16
G	H	J	K	wt	
.200	.20	.14	.031	grams	
5.08	5.08	3.56	0.79	5.2	

### Features

- low insertion loss, 0.5 dB typ.
- good isolation, 30 dB typ.
- rugged welded construction

### Applications

- HF
- ham radio
- instrumentation

### Electrical Specifications

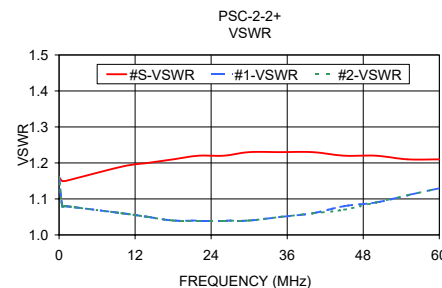
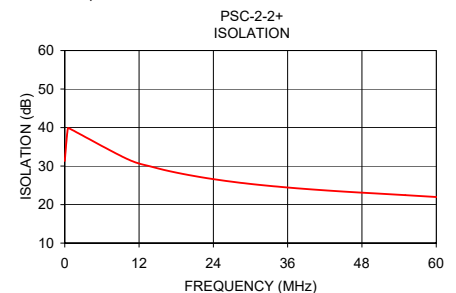
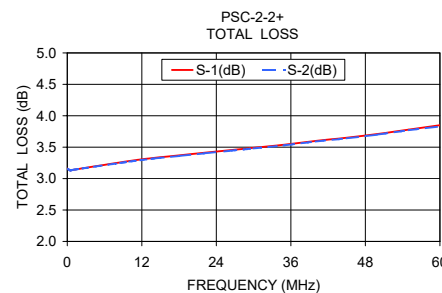
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 3.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L	M	U	L	M	U
	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
0.004-60	27	20	30	20	27	20	0.3	0.6	0.3	0.6	0.6	1.0	2.0	3.0	4.0	0.15	0.25	0.3

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  $f_U$ ]  
At low range frequency band, [ $f_L$  to  $10 f_L$ ], linearly derate maximum input power by 13 dB.

### Typical Performance Data

Frequency (MHz)	Total Loss <sup>1</sup> (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
0.01	3.16	3.16	0.00	31.34	0.01	1.16	1.16	1.16
0.50	3.13	3.13	0.00	39.80	0.00	1.15	1.08	1.08
1.00	3.14	3.14	0.00	39.56	0.00	1.15	1.08	1.08
10.00	3.28	3.27	0.00	31.90	0.01	1.19	1.06	1.06
14.00	3.33	3.32	0.00	29.85	0.01	1.20	1.05	1.05
18.00	3.37	3.36	0.01	28.31	0.03	1.21	1.04	1.04
22.00	3.41	3.40	0.01	27.11	0.03	1.22	1.04	1.04
26.00	3.45	3.44	0.01	26.15	0.03	1.22	1.04	1.04
30.00	3.49	3.48	0.01	25.36	0.04	1.23	1.04	1.04
35.00	3.54	3.53	0.01	24.57	0.04	1.23	1.05	1.05
40.00	3.60	3.59	0.01	23.92	0.04	1.23	1.06	1.06
45.00	3.65	3.64	0.01	23.38	0.05	1.22	1.08	1.07
50.00	3.71	3.70	0.01	22.91	0.05	1.22	1.09	1.09
55.00	3.78	3.77	0.01	22.46	0.07	1.21	1.11	1.11
60.00	3.85	3.83	0.01	21.98	0.07	1.21	1.13	1.13

1. Total Loss = Insertion Loss + 3dB 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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