

Plug-In

# Power Splitter/Combiner

## MSC-2-5+

2 Way-0° 50Ω 5 to 1500 MHz



CASE STYLE: A03  
PRICE: \$29.20 ea. QTY. (1-9)

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

The +Suffix has been added in order to identify 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

### Features

- wideband, 5 to 1500 MHz
- low insertion loss, 0.6 dB typ.
- rugged shielded case

### Applications

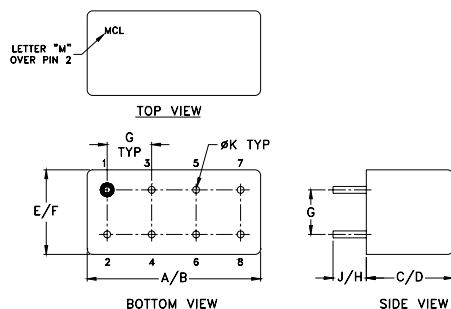
- VHF/UHF
- cellular
- instrumentation
- communications systems

### 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.
$f_L$ - $f_U$																		
5-1500	18	16	20	16	20	14	0.6	0.8	0.6	0.8	0.6	1.1	2.0	3.0	5.0	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  $f_U$ ]

### Outline Drawing



### Outline Dimensions (inch/mm)

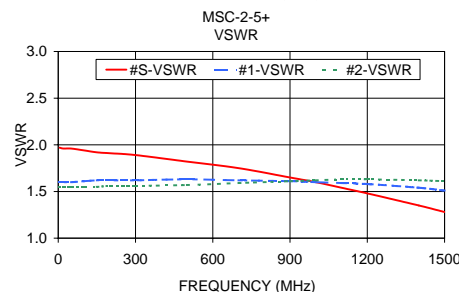
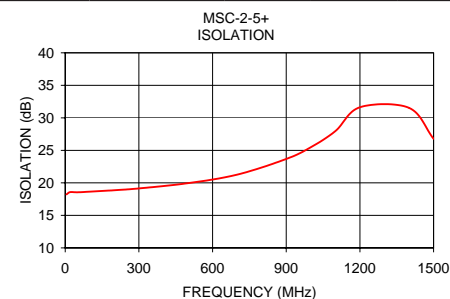
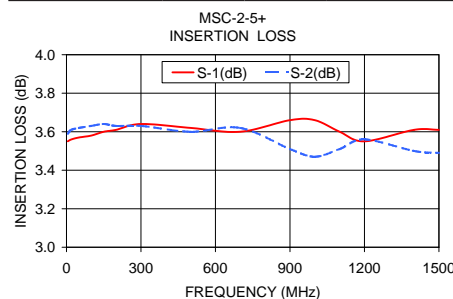
A	B	C	D	E	F
.480	.500	.390	.405	.210	.230
12.19	12.70	9.91	10.29	5.33	5.84

G	H	J	K	wt
.100	.20	.14	.020	grams
2.54	5.08	3.56	0.51	2.3

### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
5.00	3.55	3.59	0.04	18.22	0.04	1.97	1.60	1.55
20.00	3.56	3.61	0.05	18.57	0.01	1.96	1.60	1.55
50.00	3.57	3.62	0.05	18.55	0.05	1.96	1.60	1.55
100.00	3.58	3.63	0.05	18.65	0.09	1.94	1.61	1.55
150.00	3.60	3.64	0.04	18.76	0.24	1.92	1.62	1.55
200.00	3.61	3.63	0.02	18.87	0.06	1.91	1.62	1.56
300.00	3.64	3.63	0.01	19.15	0.05	1.89	1.62	1.56
500.00	3.62	3.60	0.03	19.95	0.79	1.82	1.63	1.57
700.00	3.60	3.62	0.02	21.26	0.95	1.75	1.62	1.59
900.00	3.66	3.51	0.16	23.67	0.64	1.65	1.61	1.61
1000.00	3.66	3.47	0.19	25.48	0.95	1.60	1.60	1.62
1100.00	3.60	3.51	0.09	27.96	1.18	1.54	1.59	1.63
1200.00	3.55	3.56	0.01	31.63	0.59	1.48	1.58	1.63
1400.00	3.61	3.50	0.11	31.54	0.20	1.35	1.54	1.62
1500.00	3.61	3.49	0.12	26.78	0.72	1.28	1.51	1.61



### electrical schematic



For detailed performance specs & shopping online see web site

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)

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  
M113397  
MSC-2-5+  
HY/TD/CP/AM  
090824