

Plug-In

Power Splitter/Combiner

MSC-2-1W+

2 Way-0° 50Ω 2 to 650 MHz



Generic photo used for illustration purposes only

CASE STYLE: A03

+RoHS Compliant

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

Maximum Ratings

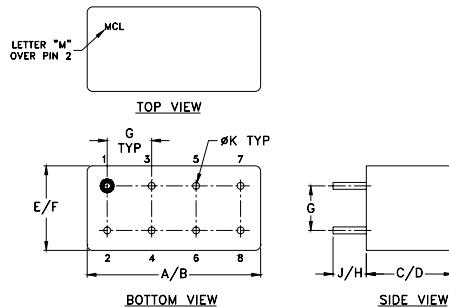
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.125W max.

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

Pin Connections

SUMPORT	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/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	

Features

- wideband, 2 to 650 MHz
- low insertion loss, 0.5 dB typ.
- rugged shielded case

Applications

- communications systems
- VHF/UHF
- instrumentation

Electrical Specifications

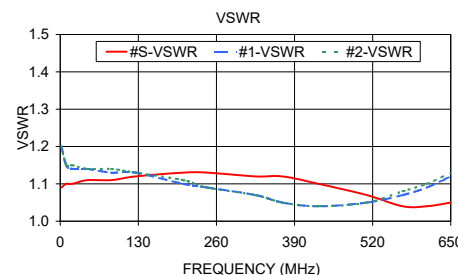
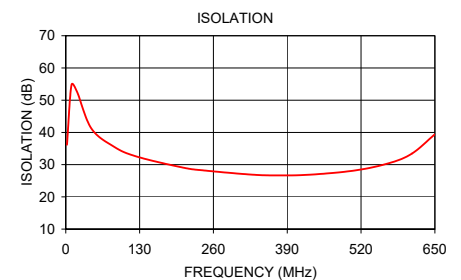
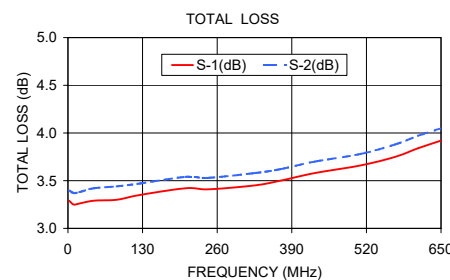
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 3.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L	M	U	L	M	U
	Typ.	Min	Typ.	Min	Typ.	Min	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
2-650	22	18	30	20	22	18	0.3	0.5	0.5	0.8	0.8	1.2	1.0	2.0	4.0	0.3	0.2	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]

Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
2.00	3.29	3.40	0.12	36.17	0.03	1.09	1.20	1.20
10.00	3.25	3.37	0.12	54.69	0.03	1.10	1.15	1.15
20.00	3.26	3.38	0.12	52.55	0.05	1.10	1.14	1.15
45.00	3.29	3.42	0.13	41.24	0.01	1.11	1.14	1.14
85.00	3.30	3.44	0.13	35.55	0.12	1.11	1.13	1.14
125.00	3.35	3.47	0.12	32.51	0.15	1.12	1.13	1.13
205.00	3.42	3.54	0.13	29.13	0.21	1.13	1.10	1.11
245.00	3.41	3.53	0.11	28.16	0.14	1.13	1.09	1.09
325.00	3.45	3.58	0.13	26.92	0.19	1.12	1.07	1.07
370.00	3.50	3.62	0.13	26.66	0.21	1.12	1.05	1.05
430.00	3.58	3.70	0.11	26.88	0.29	1.10	1.04	1.04
510.00	3.66	3.78	0.12	28.21	0.34	1.07	1.05	1.05
570.00	3.75	3.88	0.13	30.50	0.23	1.04	1.07	1.08
610.00	3.84	3.97	0.13	33.48	0.36	1.04	1.09	1.10
650.00	3.92	4.05	0.13	39.42	0.30	1.05	1.12	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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