

Plug-In

Power Splitter/Combiner

MSC-2-1+

2 Way-0° 50Ω 0.1 to 450 MHz



CASE STYLE: A03

Maximum Ratings

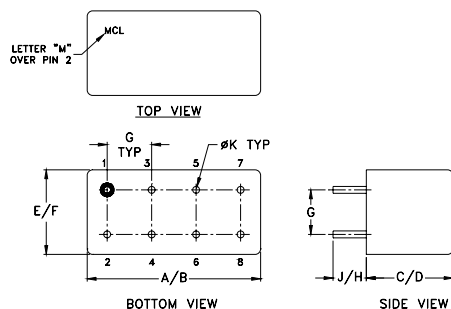
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.125W max.

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/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, 0.1 to 450 MHz
- low insertion loss, 0.4 dB typ.
- rugged shielded case

Applications

- VHF/UHF
- amateur radio
- communication receivers & transmitters

+RoHS Compliant

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

Electrical Specifications

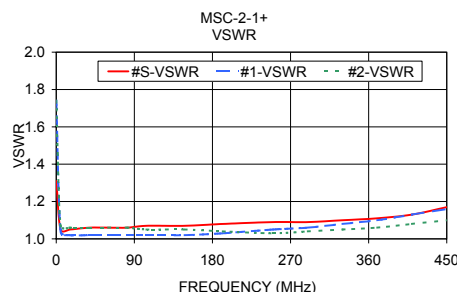
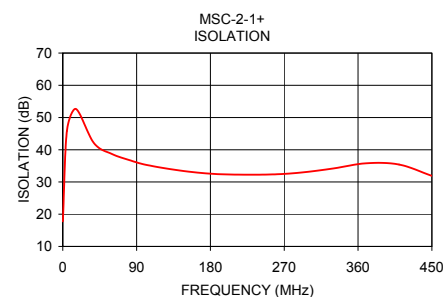
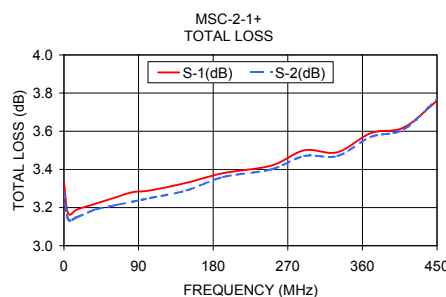
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 3.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L	M	U	L	M	U
	Typ.	Min	Typ.	Min	Typ.	Min	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
f_L - f_U																		
0.1-450	20	15	30	20	30	20	0.3	0.5	0.4	0.75	0.6	1.0	2.0	3.0	4.0	0.15	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						
0.10	3.33	3.28	0.05	17.78	0.15	1.31	1.74	1.74
5.00	3.17	3.14	0.04	45.83	0.06	1.05	1.04	1.07
16.00	3.19	3.15	0.04	52.65	0.18	1.05	1.02	1.06
38.00	3.22	3.19	0.03	42.07	0.35	1.06	1.02	1.06
60.00	3.25	3.21	0.04	38.68	0.44	1.06	1.02	1.06
82.00	3.28	3.23	0.05	36.72	0.55	1.06	1.02	1.06
104.00	3.29	3.25	0.04	35.20	0.61	1.07	1.02	1.05
148.00	3.33	3.29	0.04	33.38	0.93	1.07	1.02	1.05
192.00	3.38	3.36	0.03	32.40	0.86	1.08	1.03	1.04
250.00	3.42	3.40	0.02	32.30	1.31	1.09	1.05	1.03
290.00	3.50	3.47	0.03	32.91	1.48	1.09	1.06	1.04
330.00	3.49	3.47	0.02	34.21	1.76	1.10	1.08	1.05
370.00	3.59	3.57	0.02	35.79	1.65	1.11	1.10	1.06
410.00	3.62	3.61	0.00	35.41	2.07	1.13	1.13	1.08
450.00	3.76	3.77	0.00	31.89	2.03	1.17	1.16	1.10

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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