

Plug-In

# Power Splitter/Combiner

## MSC-3-1W

3 Way-0° 50Ω 50 to 750 MHz



CASE STYLE: A03

### Maximum Ratings

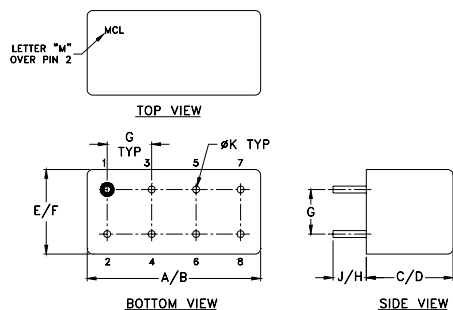
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.18W max.

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

### Pin Connections

SUM PORT	1
PORT 1	5
PORT 2	6
PORT 3	2
GROUND	3,4,7,8
CASE GROUND	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, 50 to 750 MHz
- low insertion loss, 0.4 dB typ.
- rugged welded construction

### Applications

- VHF/UHF
- defense & federal communications

### Electrical Specifications

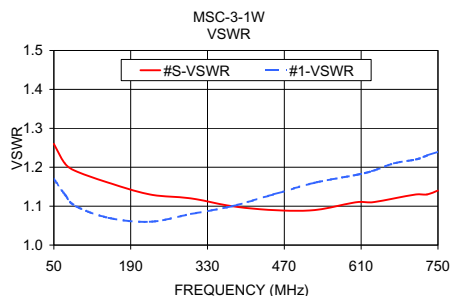
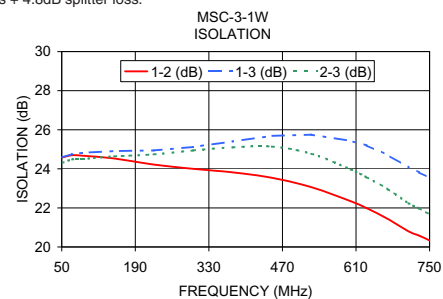
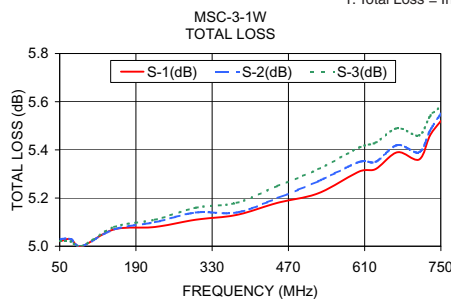
FREQ. RANGE (MHz)	ISOLATION (dB)				INSERTION LOSS (dB) ABOVE 4.8 dB				PHASE UNBALANCE (Degrees)		AMPLITUDE UNBALANCE (dB)	
	L		U		L		U		L	U	L	U
	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.
f <sub>L</sub> -f <sub>U</sub>												
50-750	22	18	22	17	0.4	1.0	0.9	1.5	4.0	7.0	0.4	0.7

L = 50-375 MHz U = 375-750 MHz

### Typical Performance Data

Freq. (MHz)	Total Loss <sup>1</sup> (dB)			Amp. Unbal. (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 2	VSWR 3
	S-1	S-2	S-3		1-2	1-3	2-3					
50.00	5.02	5.03	5.02	0.01	24.58	24.58	24.30	0.15	1.26	1.17	1.18	1.18
70.00	5.03	5.03	5.02	0.01	24.70	24.76	24.48	0.13	1.21	1.13	1.13	1.14
90.00	5.00	5.00	5.00	0.01	24.67	24.82	24.50	0.14	1.19	1.10	1.11	1.11
150.00	5.07	5.07	5.08	0.01	24.53	24.91	24.64	0.30	1.16	1.07	1.07	1.08
225.00	5.08	5.10	5.11	0.03	24.22	24.94	24.74	0.46	1.13	1.06	1.06	1.06
300.00	5.11	5.14	5.16	0.06	24.00	25.12	24.94	0.60	1.12	1.08	1.07	1.07
375.00	5.13	5.14	5.18	0.05	23.82	25.40	25.10	0.66	1.10	1.10	1.10	1.08
450.00	5.18	5.20	5.25	0.07	23.54	25.69	25.14	0.84	1.09	1.13	1.13	1.11
525.00	5.22	5.27	5.32	0.10	23.06	25.75	24.77	1.09	1.09	1.16	1.16	1.13
600.00	5.31	5.35	5.41	0.09	22.34	25.43	23.97	1.59	1.11	1.18	1.19	1.14
630.00	5.32	5.35	5.43	0.11	21.99	25.20	23.57	1.73	1.11	1.19	1.20	1.15
670.00	5.39	5.42	5.49	0.11	21.44	24.71	22.96	2.05	1.12	1.21	1.22	1.16
710.00	5.36	5.39	5.46	0.10	20.80	24.08	22.24	2.39	1.13	1.22	1.24	1.16
730.00	5.46	5.48	5.54	0.08	20.58	23.82	21.97	2.44	1.13	1.23	1.24	1.17
750.00	5.52	5.55	5.58	0.06	20.33	23.54	21.67	2.63	1.14	1.24	1.25	1.17

1. Total Loss = Insertion Loss + 4.8dB splitter loss.



### electrical schematic



### Notes

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