Plug-In

Power Splitter/Combiner

PSC-3-1+

3 Way-0° 50Ω 1 to 200 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	0.375W max.

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

Pin Connections

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

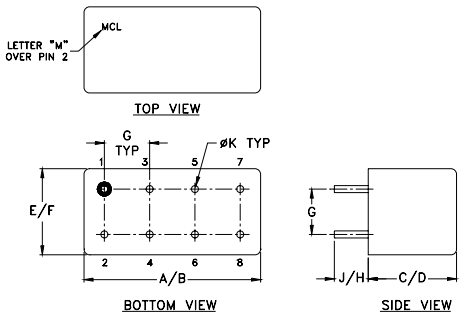
Features

- low insertion loss, 0.4 dB typ.
- high isolation, 40 dB typ.
- rugged welded construction

Applications

- VHF
- amateur & FM radio
- federal & defense communications

Outline Drawing



Outline Dimensions (inch / mm)

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

Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 4.8 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L	M	U	L	M	U
f_L-f_U	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
1-200	45	30	40	30	40	25	0.6	1.0	0.4	0.7	0.6	1.0	1.0	2.0	4.0	0.15	0.2	0.3

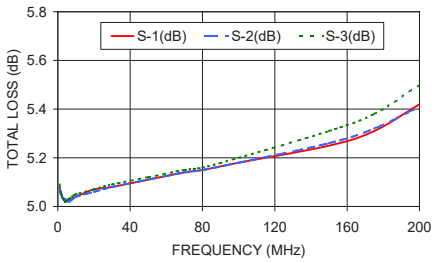
L = low range [f_L to 10 f_L] M = mid range [10 f_L to f_U/2] U= upper range [f_U/2 to f_U]

Typical Performance Data

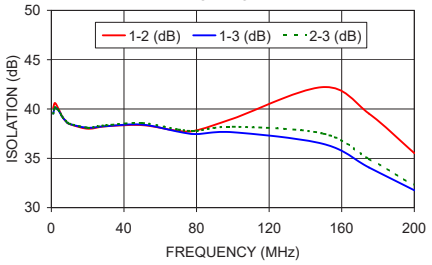
Freq. (MHz)	Total Loss[1] (dB)			Amp. Unbal. (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 2	VSWR 3
	S-1	S-2	S-3		1-2	1-3	2-3					
1.00	5.08	5.07	5.09	0.02	40.10	39.53	39.54	0.06	1.08	1.11	1.11	1.11
2.00	5.05	5.04	5.05	0.01	40.61	40.13	40.14	0.03	1.06	1.08	1.08	1.08
4.00	5.02	5.03	5.02	0.01	39.99	39.83	39.85	0.04	1.04	1.05	1.05	1.06
6.00	5.03	5.02	5.03	0.01	39.23	39.21	39.22	0.05	1.03	1.04	1.04	1.04
8.00	5.03	5.03	5.04	0.01	38.76	38.77	38.79	0.06	1.02	1.04	1.04	1.04
10.00	5.04	5.04	5.05	0.01	38.47	38.48	38.51	0.07	1.01	1.03	1.03	1.03
20.00	5.07	5.06	5.07	0.01	38.00	38.10	38.11	0.12	1.01	1.03	1.03	1.03
30.00	5.08	5.08	5.09	0.01	38.24	38.26	38.34	0.12	1.02	1.03	1.03	1.03
50.00	5.11	5.11	5.12	0.01	38.36	38.42	38.58	0.29	1.04	1.04	1.04	1.05
70.00	5.14	5.14	5.15	0.01	37.78	37.70	37.91	0.36	1.06	1.05	1.05	1.06
80.00	5.15	5.15	5.16	0.02	37.83	37.46	37.79	0.47	1.07	1.06	1.06	1.07
100.00	5.18	5.18	5.20	0.02	39.02	37.64	38.20	0.51	1.09	1.08	1.08	1.09
150.00	5.25	5.26	5.31	0.06	42.22	36.45	37.50	0.71	1.19	1.12	1.13	1.15
175.00	5.31	5.32	5.38	0.08	39.53	34.07	34.94	0.71	1.23	1.15	1.15	1.18
200.00	5.42	5.41	5.50	0.09	35.52	31.76	32.27	0.76	1.32	1.17	1.19	1.22

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

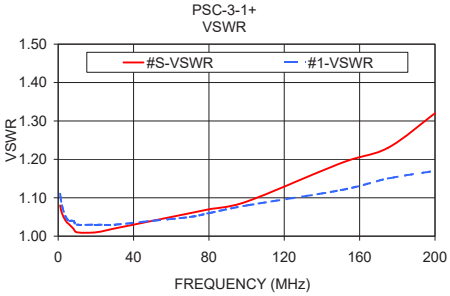
PSC-3-1+
TOTAL LOSS



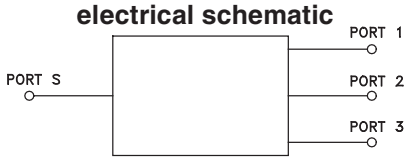
PSC-3-1+
ISOLATION



PSC-3-1+
VSWR



electrical schematic



Notes

A. 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.
B. 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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