

Power Splitter/Combiner

5 Way-0° 50Ω 1 to 300 MHz

PSC-5-1+



Generic photo used for illustration purposes only

CASE STYLE: C07

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	0.5W max.
Permanent damage may occur if any of these limits are exceeded.	

Pin Connections

SUM PORT	1
PORT 1	4
PORT 2	8
PORT 3	12
PORT 4	16
PORT 5	15
GROUND	2,5,7,11,13,14
CASE GROUND	2,5,7,11,13,14
NOT USED	3,6,9,10

Features

- low insertion loss, 0.6 dB typ.
- good isolation, 23 typ.
- rugged welded case

Applications

- UHF
- signal processing
- instrumentation

+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 7.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	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.
1-300	25	20	23	18	20	17	0.2	0.5	0.6	1.0	1.5	2.0	2	4	8	0.2	0.3	0.6

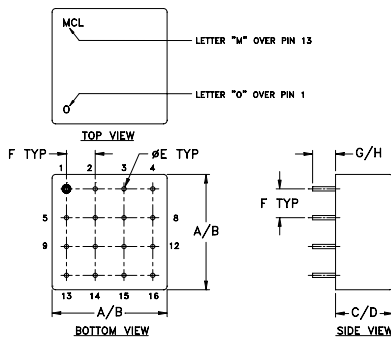
L = low range [f_L to $10 f_L$] M = mid range [$10 f_L$ to $f_U/2$] U = upper range [$f_U/2$ to f_U]

Typical Performance Data

Freq. (MHz)	Total Loss ¹ (dB)					Amp. Unbal. (dB)	Isolation (dB)				Phase Unbal. (deg.)	VSWR S	VSWR OUTPUTS
	S-1	S-2	S-3	S-4	S-5		1-2	2-3	3-4	2-5			
1.00	7.29	7.31	7.40	7.39	7.36	0.11	52.12	42.15	45.77	26.71	0.16	1.12	1.22
5.00	7.21	7.23	7.32	7.30	7.27	0.11	45.47	49.28	44.56	30.29	0.06	1.09	1.10
10.00	7.21	7.24	7.32	7.31	7.28	0.11	43.00	44.84	42.73	30.28	0.12	1.09	1.09
20.00	7.25	7.27	7.35	7.34	7.31	0.10	39.16	40.15	38.78	29.90	0.34	1.11	1.09
30.00	7.26	7.28	7.36	7.35	7.33	0.10	36.36	37.20	35.83	29.48	0.58	1.14	1.08
50.00	7.36	7.37	7.45	7.44	7.42	0.09	32.53	33.29	31.94	28.57	0.96	1.21	1.08
70.00	7.38	7.39	7.45	7.44	7.44	0.07	29.99	30.72	29.40	27.64	1.32	1.29	1.09
90.00	7.48	7.48	7.53	7.52	7.53	0.05	28.13	28.87	27.51	26.73	1.67	1.38	1.09
110.00	7.57	7.57	7.60	7.59	7.62	0.05	26.73	27.44	26.11	25.91	1.97	1.46	1.09
140.00	7.67	7.67	7.68	7.69	7.72	0.05	25.18	25.88	24.55	24.88	2.27	1.55	1.08
170.00	7.73	7.73	7.71	7.73	7.79	0.08	24.10	24.85	23.44	24.07	2.73	1.63	1.09
200.00	7.88	7.88	7.85	7.86	7.94	0.09	23.49	24.26	22.80	23.57	3.03	1.70	1.08
230.00	7.78	7.80	7.75	7.78	7.87	0.12	23.27	24.06	22.52	23.39	3.33	1.66	1.06
260.00	8.00	8.03	7.96	8.00	8.14	0.18	23.55	24.38	22.66	23.67	3.69	1.57	1.07
300.00	7.79	7.83	7.76	7.81	7.99	0.23	24.87	26.03	23.61	25.29	4.34	1.36	1.06

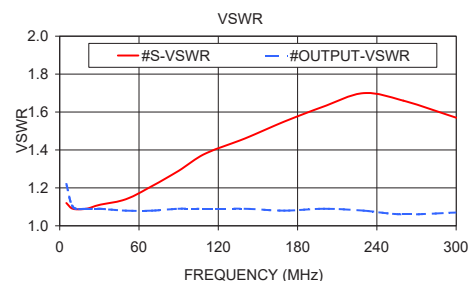
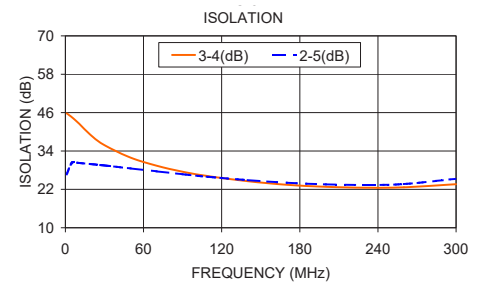
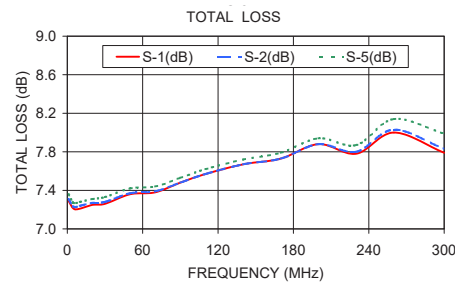
1. Total Loss = Insertion Loss + 7dB splitter loss.

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	wt
.770	.810	.380	.410	.030	.200	.20	.14	grams
19.56	20.57	9.65	10.41	0.76	5.08	5.08	3.56	11.0



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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