

Power Splitter/Combiner

6 Way-0° 50Ω 1 to 175 MHz

PSC-6-1+



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

Features

- low insertion loss, 0.6 dB typ.
- high isolation, 30 dB typ.
- rugged welded case
- excellent amplitude unbalance, 0.1 dB typ.

Applications

- VHF
- radio communication
- instrumentation

+RoHS Compliant

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

Electrical Specifications

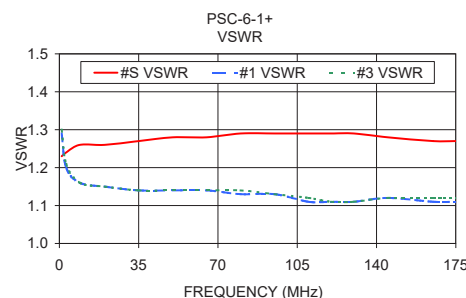
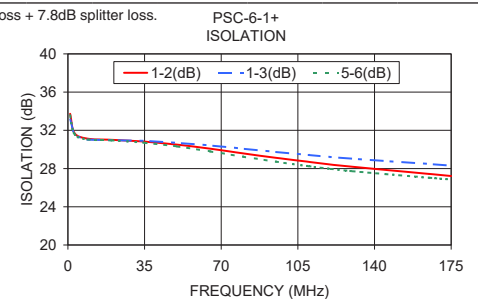
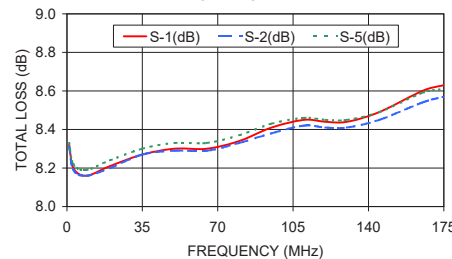
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 7.8 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L		M		U	
	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
f _L -f _U																		
1-175	35	25	30	23	25	18	0.6	1.2	0.6	1.1	0.6	1.3	2	4	8	0.1	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

Frequency (MHz)	Total Loss ¹ (dB)			Amplitude Unbalance (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 3
	S-1	S-2	S-3		1-2	1-3	5-6				
1.00	8.32	8.31	8.33	0.03	33.73	33.10	33.56	0.16	1.23	1.29	1.30
3.00	8.20	8.19	8.22	0.03	31.72	31.45	31.60	0.14	1.24	1.20	1.21
9.00	8.16	8.16	8.19	0.04	31.13	31.02	31.05	0.14	1.26	1.16	1.16
20.00	8.21	8.20	8.24	0.04	31.01	30.97	30.95	0.19	1.26	1.15	1.15
35.00	8.27	8.27	8.30	0.04	30.82	30.90	30.70	0.28	1.27	1.14	1.14
50.00	8.30	8.29	8.33	0.04	30.50	30.69	30.31	0.38	1.28	1.14	1.14
65.00	8.30	8.29	8.33	0.04	30.08	30.42	29.79	0.51	1.28	1.14	1.14
80.00	8.34	8.33	8.37	0.04	29.59	30.08	29.24	0.60	1.29	1.13	1.14
95.00	8.41	8.38	8.43	0.05	29.12	29.73	28.72	0.75	1.29	1.13	1.13
110.00	8.45	8.42	8.46	0.04	28.70	29.42	28.25	0.83	1.29	1.11	1.12
120.00	8.44	8.41	8.45	0.05	28.42	29.20	27.96	0.92	1.29	1.11	1.11
130.00	8.44	8.41	8.45	0.05	28.19	29.03	27.72	0.97	1.29	1.11	1.11
145.00	8.49	8.45	8.49	0.06	27.86	28.79	27.42	1.11	1.28	1.12	1.12
165.00	8.60	8.54	8.59	0.08	27.44	28.48	27.03	1.21	1.27	1.11	1.12
175.00	8.63	8.57	8.61	0.09	27.21	28.30	26.86	1.43	1.27	1.11	1.12

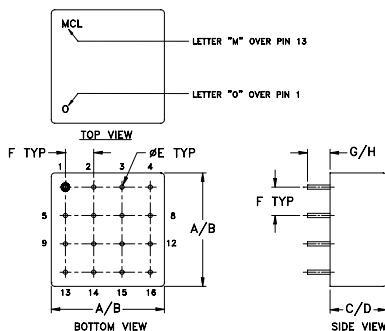
PSC-6-1+ 1. Total Loss = Insertion Loss + 7.8dB splitter loss.



electrical schematic



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

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.
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