Plug-In

Power Splitter/Combiner

PSC-12-1+

12 Way-0° 50Ω 1 to 200 MHz

CASE STYLE: E10

+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	0.87W max.

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

Pin Connections

SUM PORT	5
PORT 1	7
PORT 2	8
PORT 3	1
PORT 4	2
PORT 5	31
PORT 6	32
PORT 7	25
PORT 8	26
PORT 9	22
PORT 10	30
PORT 11	19
PORT 12	27
GROUND	all other pins
CASE GROUND	3,6

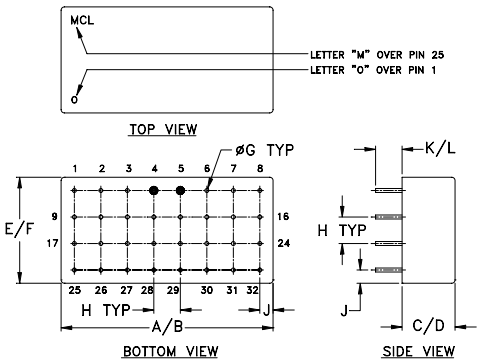
Features

- low insertion loss, 0.8 dB typ.
- good isolation, 27 dB typ.
- rugged welded case

Applications

- HF/VHF
- communication systems
- signal processing

Outline Drawing



Outline Dimensions (inch / mm)

A	B	C	D	E	F	G
1.580	1.620	.380	.410	.770	.810	.030
40.13	41.15	9.65	10.41	19.56	20.57	0.76

H	J	K	L	wt
.200	.10	.20	.14	grams
5.08	2.54	5.08	3.56	23.0

Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 10.8 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	35	30	27	20	21	18	0.5	0.8	0.8	1.2	1.0	1.4	4	8	16	0.2	0.4	0.7

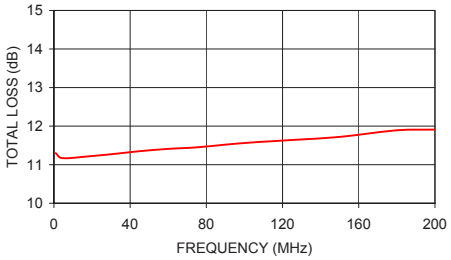
L = low range [f_L to 10 f_L] M = mid range [10 f_L to f_U/2] U= upper range [f_U/2 to f_U]

Typical Performance Data

Freq. (MHz)	Total Loss[1] (dB)	Amplitude Unbalance (dB)	Isolation (dB)		Phase Unbalance (deg.)	VSWR S	VSWR 12
			1-2	2-4			
1.00	11.30	0.16	42.68	42.83	0.40	1.14	1.17
3.00	11.19	0.14	47.69	47.94	0.18	1.08	1.09
5.00	11.17	0.14	46.95	47.73	0.14	1.06	1.08
8.00	11.17	0.13	45.01	46.14	0.23	1.05	1.07
15.00	11.20	0.14	41.53	42.92	0.40	1.05	1.06
30.00	11.27	0.13	37.29	38.55	0.67	1.06	1.06
45.00	11.35	0.14	34.70	36.08	0.97	1.08	1.06
60.00	11.41	0.14	32.86	34.20	1.42	1.09	1.05
75.00	11.45	0.14	31.48	32.85	1.65	1.11	1.05
90.00	11.52	0.16	30.40	31.78	1.96	1.13	1.04
105.00	11.58	0.14	29.57	30.96	2.21	1.15	1.04
125.00	11.64	0.15	28.75	30.17	2.68	1.17	1.03
150.00	11.72	0.14	28.20	29.63	3.19	1.19	1.03
180.00	11.89	0.18	28.08	29.45	3.99	1.22	1.04
200.00	11.91	0.21	28.33	29.66	4.45	1.24	1.06

1. Total Loss = Insertion Loss + 10.8dB splitter loss.

PSC-12-1+
TOTAL LOSS



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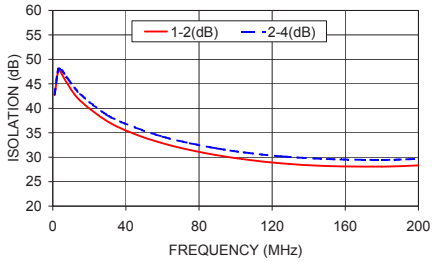
ISOLATION



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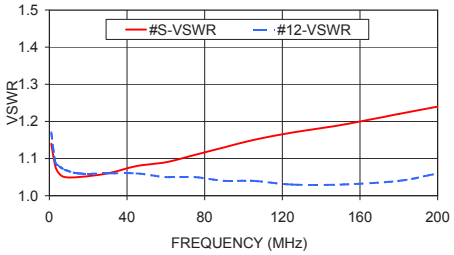
VSWR



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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