

Plug-In

Power Splitter/Combiner

PRSC-2050

2 Way-0° Resistive 50Ω DC to 2000 MHz

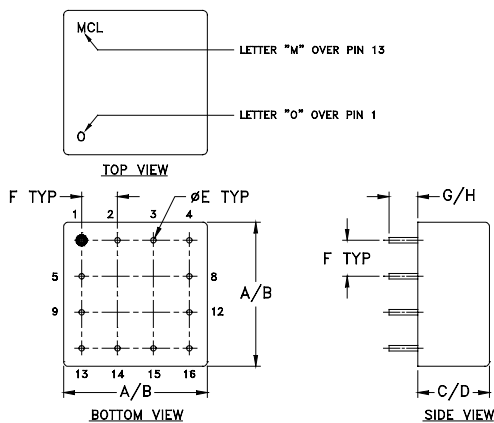
Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.125W max.
Permanent damage may occur if any of these limits are exceeded.	

Pin Connections

SUMPORT	5
PORT 1	3
PORT 2	15
GROUND	1,2,4,8,9,12,13,14,16
CASE GROUND	1,2,4,8,9,12,13,14,16

Outline Drawing



Outline Dimensions (inch mm)

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

Features

- wideband, DC to 2000 MHz
- hermetic metal case
- excellent amplitude unbalance 0:2 dB typ.
- excellent VSWR, 1.1:1 typ.

Applications

- test set-ups
- video or cable tv
- military, hi-rel application

Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)			INSERTION LOSS (dB) ABOVE 6.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L	M	U	L	M	U	L	M	U	L	M	U	L	M	U
$f_L - f_U$	Typ.	Typ.	Typ.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
DC-2000	6.0	6.2	6.5	0.1	0.3	0.2	0.7	0.5	1.0	1	3	5	0.1	0.3	0.5

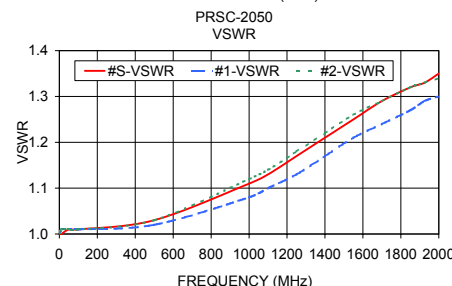
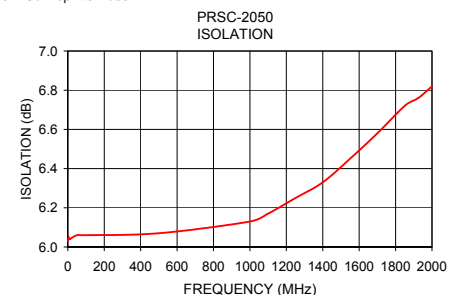
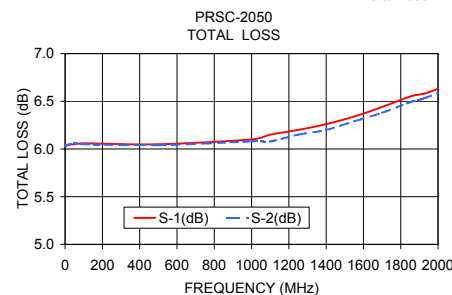
L = DC-100 MHz M = 100-1000 MHz U = 1000-2000 MHz

This is a resistive power divider to enable frequency coverage from dc to the highest rated frequency. Since resistive power divider do not provide a high degree of isolation (basically isolation equals the insertion loss between ports), an amplifier such as Mini-Circuits' ZFL series is recommended when high isolation is required. Matched power rating 0.75W, internal load dissipation 0.375W.

Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
1.00	6.03	6.03	0.00	6.03	0.02	1.00	1.00	1.00
5.00	6.03	6.04	0.01	6.05	0.06	1.00	1.00	1.00
10.00	6.04	6.04	0.00	6.04	0.09	1.00	1.01	1.01
50.00	6.05	6.06	0.00	6.06	0.04	1.01	1.01	1.01
100.00	6.06	6.05	0.00	6.06	0.10	1.01	1.01	1.01
500.00	6.05	6.04	0.01	6.07	0.13	1.03	1.02	1.03
1000.00	6.10	6.08	0.02	6.13	0.05	1.11	1.08	1.12
1100.00	6.15	6.08	0.07	6.17	0.09	1.13	1.10	1.14
1250.00	6.20	6.15	0.05	6.25	0.06	1.17	1.13	1.18
1400.00	6.26	6.20	0.06	6.33	0.06	1.21	1.17	1.22
1550.00	6.34	6.29	0.05	6.45	0.20	1.25	1.21	1.26
1700.00	6.44	6.38	0.06	6.58	0.40	1.29	1.24	1.29
1850.00	6.55	6.49	0.05	6.72	0.69	1.32	1.27	1.32
1925.00	6.58	6.53	0.05	6.76	0.76	1.33	1.29	1.33
2000.00	6.63	6.59	0.04	6.82	0.98	1.35	1.30	1.34

1. Total Loss = Insertion Loss + 3dB splitter loss.



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.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

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