

# Power Splitter/Combiner

## ZX10-2-71-S+

2 Way-0° 50Ω 2950 to 7100 MHz

### Maximum Ratings

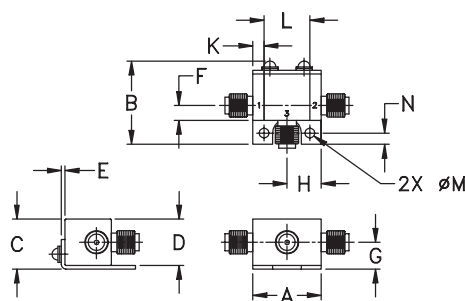
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1.0W max.
Internal Dissipation (as a combiner)	0.125W max.
DC Current	1.0A (500mA for each port)

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

### Coaxial Connections

SUM PORT	3
PORT 1	1
PORT 2	2

### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.74	.90	.54	.50	.04	.16	.29
18.80	22.86	13.72	12.70	1.02	4.06	7.37

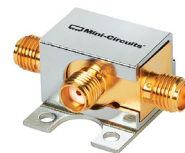
H	J	K	L	M	N	wt
.37	--	.122	.496	.106	.122	grams
9.40	--	3.10	12.60	2.69	3.10	20.0

### Features

- low insertion loss, 0.25 dB typ.
- excellent amplitude unbalance
- very good phase unbalance
- small size
- low cost
- protected under U.S. Patent 6,790,049 & 6,963,255

### Applications

- SHF
- communications
- defense
- cable tv relay



Generic photo used for illustration purposes only

CASE STYLE: FL905

Connectors	Model
SMA	ZX10-2-71-S+

**+RoHS Compliant**

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

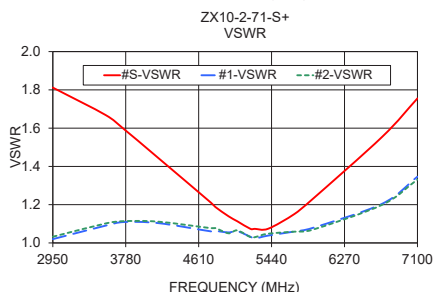
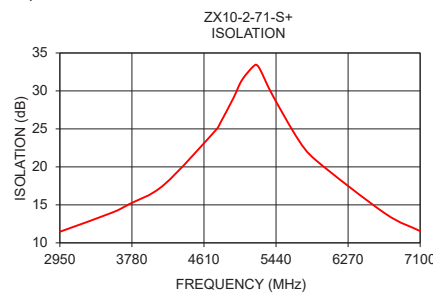
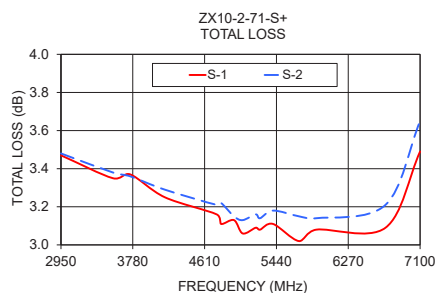
### Electrical Specifications (T<sub>AMB</sub>=25°C)

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 3.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
	Typ.	Min	Typ.	Max.	Max.	Max.
2950-7100	23	10	0.25	0.9	3.0	0.4
4500-5700	23	18	0.2	0.4	3.0	0.3

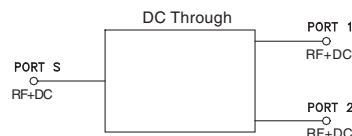
### Typical Performance Data

Frequency (MHz)	Total Loss <sup>1</sup> (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
2950.00	3.47	3.48	0.01	11.46	0.55	1.81	1.02	1.03
3550.00	3.35	3.38	0.03	13.97	0.48	1.67	1.09	1.10
3750.00	3.37	3.36	0.01	15.10	0.44	1.60	1.11	1.11
4150.00	3.25	3.29	0.04	17.65	0.45	1.44	1.10	1.11
4750.00	3.16	3.21	0.04	24.89	0.67	1.21	1.06	1.08
4800.00	3.11	3.22	0.10	25.83	0.43	1.19	1.06	1.08
4950.00	3.13	3.15	0.02	29.08	0.53	1.14	1.05	1.05
5050.00	3.06	3.13	0.07	31.47	0.54	1.11	1.06	1.07
5200.00	3.09	3.16	0.08	33.43	0.44	1.07	1.03	1.03
5250.00	3.08	3.14	0.06	32.96	0.41	1.07	1.02	1.03
5400.00	3.11	3.18	0.08	29.44	0.66	1.07	1.04	1.05
5700.00	3.02	3.15	0.13	23.53	0.70	1.15	1.06	1.06
5900.00	3.08	3.14	0.07	20.87	0.76	1.23	1.08	1.07
6700.00	3.09	3.21	0.12	13.84	0.64	1.56	1.21	1.20
7100.00	3.49	3.65	0.16	11.55	0.30	1.76	1.35	1.33

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.
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