

# Power Splitter/Combiner

## ZBSC-5-1

5 Way-0° 50Ω

120 to 520 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	0.625W max.

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

### Coaxial Connections

SUM PORT	S
PORT 1	1
PORT 2	2
PORT 3	3
PORT 4	4
PORT 5	5

### Features

- wideband, 120 to 520 MHz
- good isolation, 25dB typ.
- rugged, shielded case

### Applications

- VHF/UHF
- instrumentation
- signal processing



CASE STYLE: UU102  
Connectors Model  
SMA ZBSC-5-1-S

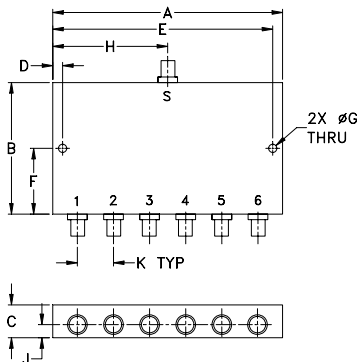
### Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)	INSERTION LOSS (dB) ABOVE 7.0 dB	PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
$f_L$ - $f_U$	Typ. Min.	Typ. Max.	Max.	Max.
120-520	25 18	1.0 2.0	8	0.9

### Typical Performance Data

Freq. (MHz)	Total Loss <sup>1</sup> (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	4-5			
120.00	7.82	7.75	7.78	7.79	7.83	0.08	27.14	24.62	25.48	24.71	1.56	1.57	1.23
140.00	7.84	7.79	7.83	7.83	7.87	0.08	27.07	24.96	25.72	24.85	1.80	1.50	1.20
160.00	7.76	7.70	7.74	7.76	7.80	0.10	26.87	25.08	25.79	24.79	2.11	1.45	1.19
190.00	7.75	7.67	7.72	7.73	7.80	0.13	26.44	25.06	25.69	24.58	2.54	1.44	1.19
220.00	7.91	7.81	7.86	7.90	7.97	0.16	26.15	25.03	25.59	24.39	2.74	1.39	1.15
250.00	7.81	7.73	7.81	7.83	7.92	0.19	25.79	24.96	25.51	24.15	3.12	1.35	1.14
280.00	7.86	7.77	7.86	7.88	7.99	0.22	25.39	24.77	25.30	23.84	3.40	1.36	1.15
310.00	7.97	7.82	7.91	7.96	8.10	0.28	25.12	24.66	25.18	23.63	3.52	1.34	1.11
340.00	7.92	7.78	7.91	7.95	8.09	0.31	24.88	24.59	25.13	23.46	3.84	1.30	1.11
370.00	8.01	7.86	8.01	8.05	8.21	0.34	24.55	24.41	24.96	23.20	4.23	1.32	1.11
410.00	7.99	7.83	7.99	8.02	8.24	0.41	24.18	24.22	24.80	22.91	4.38	1.32	1.08
450.00	8.15	7.97	8.19	8.22	8.43	0.46	23.71	23.98	24.59	22.60	4.94	1.34	1.10
480.00	8.14	7.94	8.16	8.21	8.47	0.53	23.31	23.66	24.34	22.33	5.20	1.39	1.08
500.00	8.17	7.96	8.20	8.26	8.52	0.56	22.96	23.47	24.14	22.10	5.29	1.42	1.07
520.00	8.30	8.08	8.37	8.39	8.67	0.59	22.58	23.21	23.91	21.88	5.41	1.45	1.09

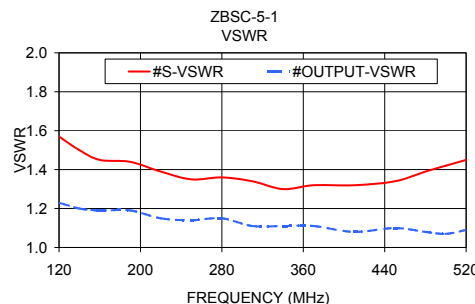
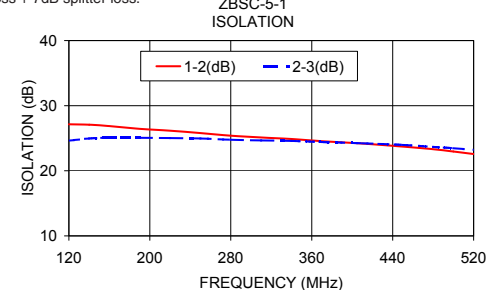
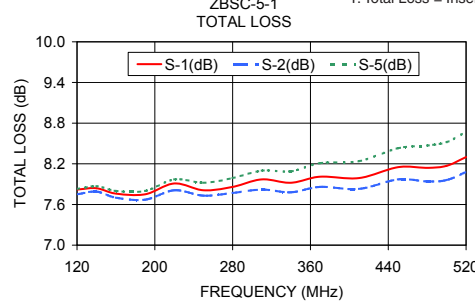
### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F
3.50	2.00	.50	.150	3.350	1.00
88.90	50.80	12.70	3.81	85.09	25.40
G	H	J	K	wt	
.125	1.75	.20	.55	grams	
3.18	44.45	5.08	13.97	120	

1. Total Loss = Insertion Loss + 7dB 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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