

Coaxial

# Power Splitter/Combiner

## ZSC-4-3-75+

4 Way-0° 75Ω 0.25 to 250 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	0.250W 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

### Features

- wideband, 0.25 to 250 MHz
- high isolation, 30 dB typ.
- good VSWR, 1.20:1 typ.
- rugged shielded case

### Applications

- HF/VHF
- radio communication



Generic photo used for illustration purposes only

CASE STYLE: N27

Connectors Model

**BNC** ZSC-4-3-75+

**BRACKET(OPTION "B")**

**BRACKET(OPTION "BR")**

**+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 6.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		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.
$f_L$ - $f_U$	28	20	30	20	27	20	0.4	0.8	0.3	0.7	0.5	1.0	1	2	3	0.15	0.20	0.25

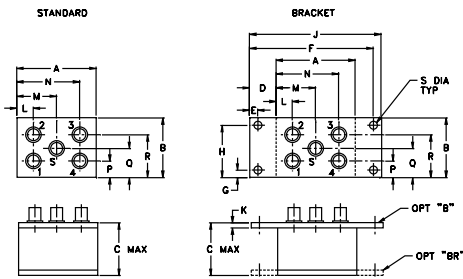
L = low range [ $f_L$  to  $10 f_L$ ] M = mid range [ $10 f_L$  to  $f_U/2$ ] U = upper range [ $f_U/2$  to  $f_U$ ]

### Typical Performance Data

Freq. (MHz)	Total Loss <sup>1</sup> (dB)				Amp. Unbal. (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 2	VSWR 3	VSWR 4
	S-1	S-2	S-3	S-4		1-2	2-3	3-4						
0.25	6.14	6.19	6.15	6.18	0.05	33.11	58.52	33.87	0.34	1.17	1.14	1.15	1.14	1.14
1.00	6.09	6.14	6.11	6.15	0.05	39.99	63.40	39.46	0.20	1.14	1.07	1.07	1.07	1.07
1.50	6.12	6.15	6.11	6.14	0.05	41.72	61.43	41.10	0.13	1.14	1.06	1.06	1.06	1.06
10.00	6.08	6.14	6.12	6.13	0.06	43.38	51.55	43.62	0.05	1.15	1.03	1.03	1.03	1.03
55.00	6.11	6.18	6.16	6.19	0.09	35.81	38.88	35.25	0.05	1.15	1.05	1.05	1.05	1.05
100.00	6.13	6.22	6.19	6.19	0.09	32.37	34.38	31.67	0.30	1.14	1.08	1.08	1.08	1.08
110.00	6.16	6.21	6.18	6.22	0.06	31.82	33.64	31.15	0.25	1.13	1.08	1.09	1.08	1.09
120.00	6.17	6.23	6.21	6.21	0.06	31.44	33.07	30.68	0.08	1.13	1.09	1.10	1.09	1.09
135.00	6.19	6.23	6.21	6.22	0.03	30.83	32.22	30.07	0.29	1.12	1.11	1.11	1.11	1.11
155.00	6.22	6.24	6.23	6.24	0.03	30.27	31.27	29.40	0.31	1.11	1.13	1.13	1.12	1.13
185.00	6.26	6.27	6.25	6.26	0.02	29.83	30.10	28.83	0.46	1.11	1.16	1.16	1.16	1.16
205.00	6.28	6.26	6.23	6.24	0.04	29.72	29.51	28.60	0.39	1.11	1.19	1.19	1.18	1.19
230.00	6.33	6.28	6.26	6.29	0.07	29.78	28.88	28.50	0.51	1.12	1.22	1.22	1.22	1.22
240.00	6.36	6.30	6.29	6.30	0.07	29.88	28.72	28.56	0.58	1.13	1.23	1.23	1.23	1.23
250.00	6.37	6.32	6.30	6.30	0.07	30.03	28.48	28.58	0.67	1.14	1.24	1.25	1.24	1.25

1. Total Loss = Insertion Loss + 6dB splitter loss.

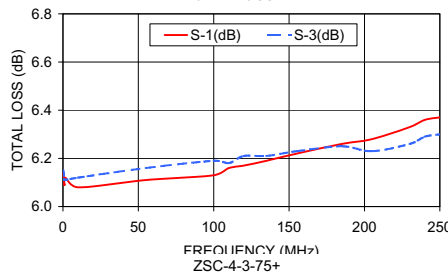
### Outline Drawing



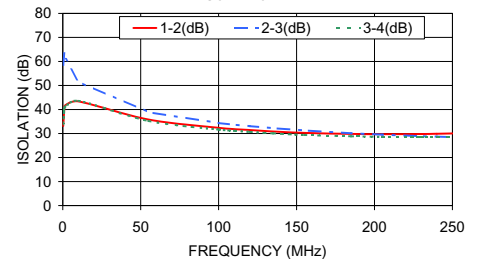
### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J
2.25	1.38	1.24	.50	.150	3.100	.138	1.238	3.25
57.15	35.05	31.50	12.70	3.81	78.74	3.51	31.45	82.55
K	L	M	N	P	Q	R	S	wt
.10	.48	1.13	1.78	.36	.69	1.01	.150	grams
2.54	12.19	28.70	45.21	9.14	17.53	25.65	3.81	92.0

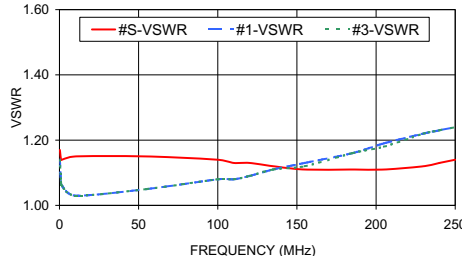
ZSC-4-3-75+ TOTAL LOSS



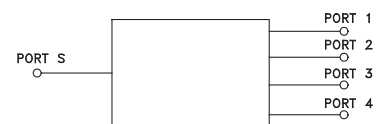
ZSC-4-3-75+ ISOLATION



VSWR



### 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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