

# Coaxial Power Splitter/Combiner

## ZSC-3-1-75+ ZSC-3-1-75

3 Way-0° 75Ω 1 to 200 MHz



BNC version shown  
CASE STYLE: P25

### 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	0.375W 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

### Features

- low insertion loss, 0.4 dB typ.
- high isolation, 35 dB typ.
- excellent amplitude unbalance, 0.1 dB typ.
- excellent phase unbalance, 0.5 deg. typ.
- rugged shielded case

### Applications

- VHF
- instrumentation
- radio communication system

Connectors	Model	Price	Qty.
BNC	ZSC-3-1-75(+)	\$52.95	(1-9)
BRACKET (OPTION "B")		\$5.00	(1+)
BRACKET (OPTION "BR")		\$1.50	(1+)

### +RoHS Compliant

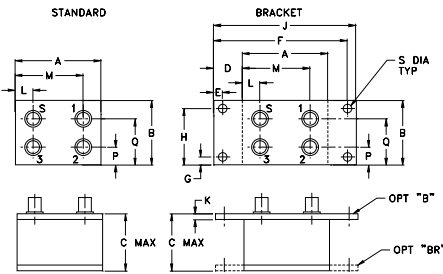
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

### Splitter Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 4.8 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.
$f_L$ - $f_U$																		
1-200	35	30	35	25	35	25	0.6	1.0	0.4	0.7	0.6	1.0	2.0	3.0	4.0	0.15	0.2	0.3

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  $f_U$ ]

### Outline Drawing



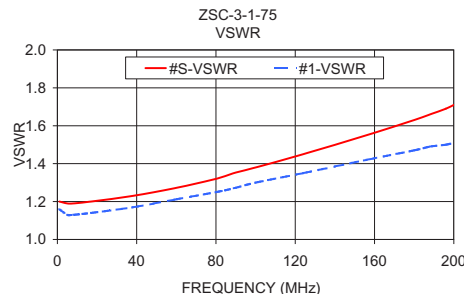
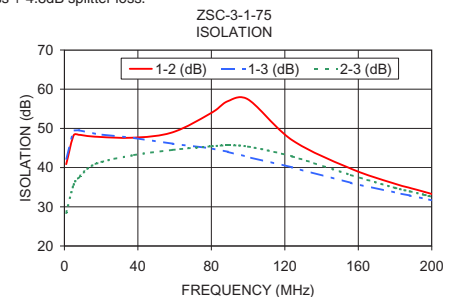
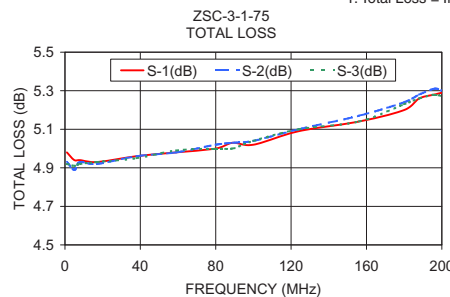
### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	S	wt
2.25	1.38	1.24	.50	.150	3.100	.138	1.238									grams
57.15	35.05	31.50	12.70	3.81	78.74	3.51	31.45									
																grams
3.25	.10	.78	1.47	--	.38	1.00	.150									grams
82.55	2.54	19.81	37.34	--	9.65	25.40	3.81									110.0

### 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
	S-1	S-2	S-3		1-2	1-3	2-3					
1.00	4.98	4.93	4.92	0.06	40.87	42.29	28.44	0.48	1.20	1.16	1.19	1.18
5.00	4.94	4.89	4.91	0.05	48.19	49.46	35.58	0.32	1.19	1.13	1.13	1.12
8.00	4.94	4.93	4.92	0.02	48.35	49.54	37.59	0.17	1.19	1.13	1.13	1.13
17.00	4.93	4.92	4.93	0.01	47.87	48.58	40.94	0.15	1.20	1.14	1.14	1.13
38.00	4.96	4.96	4.95	0.02	47.63	47.55	43.21	0.11	1.23	1.17	1.17	1.16
59.00	4.98	4.98	4.99	0.01	49.01	46.07	44.52	0.19	1.27	1.21	1.20	1.20
80.00	5.00	5.02	5.00	0.02	53.96	44.90	45.44	0.09	1.32	1.25	1.25	1.25
89.00	5.03	5.03	5.00	0.03	56.96	44.03	45.65	0.19	1.35	1.27	1.27	1.27
100.00	5.02	5.04	5.04	0.02	57.39	42.71	45.36	0.29	1.38	1.30	1.30	1.29
124.00	5.09	5.10	5.10	0.02	47.00	40.05	42.84	0.22	1.45	1.35	1.35	1.35
156.00	5.14	5.17	5.14	0.03	39.72	36.08	38.10	0.22	1.55	1.42	1.42	1.42
180.00	5.20	5.24	5.23	0.03	35.87	33.63	34.83	0.35	1.63	1.47	1.46	1.46
188.00	5.26	5.28	5.26	0.02	34.82	32.87	33.92	0.10	1.66	1.49	1.48	1.48
196.00	5.28	5.31	5.28	0.03	33.80	32.08	33.04	0.28	1.69	1.50	1.49	1.49
200.00	5.29	5.30	5.27	0.03	33.27	31.63	32.52	0.28	1.71	1.51	1.50	1.50

1. Total Loss = Insertion Loss + 4.8dB 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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