

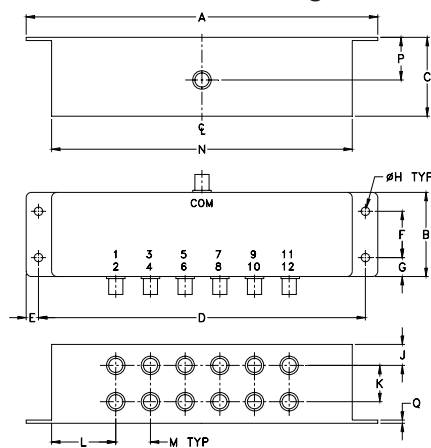
12 Way-0° 75Ω 5 to 860 MHz

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	0.87W max.
Permanent damage may occur if any of these limits are exceeded.	

Coaxial Connections

SUM PORT	S(COM)
PORT 1,2,3,...,12	1,2,3,...,12

Outline Drawing**Outline Dimensions (inch/mm)**

A	B	C	D	E	F	G	H
6.69	1.60	1.50	6.22	.24	.88	.36	.160
169.93	40.64	38.10	157.99	6.10	22.35	9.14	4.06
J	K	L	M	N	P	Q	wt.
.40	.69	1.22	.66	5.72	.81	.06	grams
10.16	17.53	30.99	16.76	145.29	20.57	1.52	310.0

Features

- high isolation, 35 dB typ.
- excellent amplitude unbalance, 0.2 dB typ.
- rugged shielded case

Applications

- VHF/UHF
- federal and defense communications
- instrumentation



Generic photo used for illustration purposes only

CASE STYLE: R67

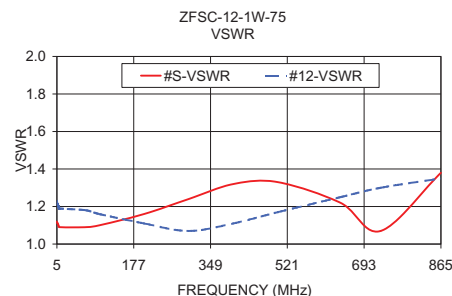
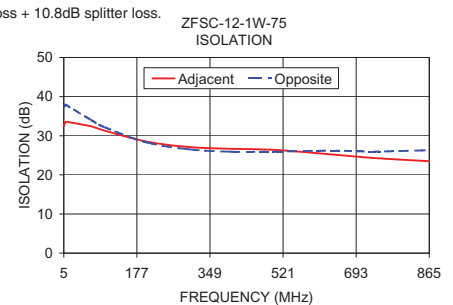
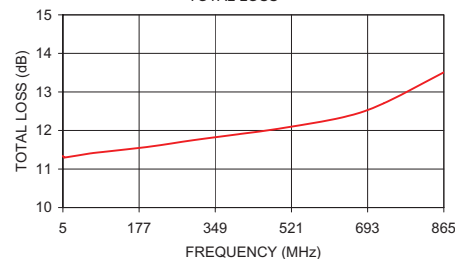
Connectors	Model
BNC	ZFSC-12-1W-75

Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 10.8 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	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.
5-860	33	22	30	20	26	18	0.5	1.2	0.8	2.5	1.6	4.2	2	8	20	0.7	0.8	1.5

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 ¹ (dB)	Amplitude Unbalance (dB)	Isolation (dB)		Phase Unbalance (deg.)	VSWR S	VSWR 12
			Adjacent	Opposite			
5.00	11.34	0.11	32.45	37.42	0.47	1.12	1.23
6.00	11.32	0.11	32.87	37.57	0.47	1.11	1.21
7.00	11.31	0.10	33.13	37.71	0.44	1.11	1.21
8.00	11.30	0.10	33.33	37.80	0.45	1.10	1.20
9.00	11.31	0.09	33.47	37.86	0.41	1.10	1.20
10.00	11.30	0.10	33.58	37.90	0.45	1.09	1.19
70.00	11.41	0.04	32.40	33.98	0.74	1.09	1.18
100.00	11.45	0.06	31.34	32.22	0.69	1.10	1.16
200.00	11.58	0.08	28.50	28.31	0.84	1.16	1.11
300.00	11.75	0.12	27.11	26.53	0.96	1.24	1.07
400.00	11.90	0.19	26.65	25.92	0.96	1.32	1.11
500.00	12.06	0.25	26.39	25.96	1.32	1.33	1.17
640.00	12.35	0.40	25.20	26.20	2.75	1.22	1.25
730.00	12.71	0.49	24.34	25.95	3.88	1.07	1.30
865.00	13.51	0.66	23.49	26.29	5.58	1.38	1.35

ZFSC-12-1W-75
1. Total Loss = Insertion Loss + 10.8dB splitter loss.**electrical schematic****Notes**

- A. 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.
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12 Way-0° Power Splitter/Combiner

ZFSC-12-1W-75

Typical Performance Data

FREQ. (MHz)	TOTAL LOSS ¹ (dB)	AMP. UNBAL. (dB)	ISOLATION (dB)		PHASE UNBAL. (deg.)	FREQ. (MHz)	VSWR (:1)	
			Adjacent	Opposite			S	OUTPUTS
5.0	11.34	0.11	32.45	37.42	0.47	5.0	1.12	1.23
6.0	11.32	0.11	32.87	37.57	0.47	6.0	1.11	1.21
7.0	11.31	0.10	33.13	37.71	0.44	7.0	1.11	1.21
8.0	11.30	0.10	33.33	37.80	0.45	8.0	1.10	1.20
9.0	11.31	0.09	33.47	37.86	0.41	9.0	1.10	1.20
10.0	11.30	0.10	33.58	37.90	0.45	10.0	1.09	1.19
70.0	11.41	0.04	32.40	33.98	0.74	70.0	1.09	1.18
100.0	11.45	0.06	31.34	32.22	0.69	100.0	1.10	1.16
200.0	11.58	0.08	28.50	28.31	0.84	200.0	1.16	1.11
300.0	11.75	0.12	27.11	26.53	0.96	300.0	1.24	1.07
400.0	11.90	0.19	26.65	25.92	0.96	400.0	1.32	1.11
500.0	12.06	0.25	26.39	25.96	1.32	500.0	1.33	1.17
640.0	12.35	0.40	25.20	26.20	2.75	640.0	1.22	1.25
730.0	12.71	0.49	24.34	25.95	3.88	730.0	1.07	1.30
865.0	13.51	0.66	23.49	26.29	5.58	865.0	1.38	1.35

¹ Total Loss = Insertion Loss+ 10.8dB Splitter Loss

REV. X2

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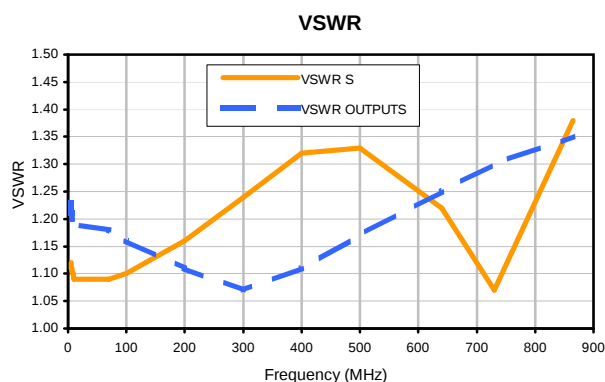
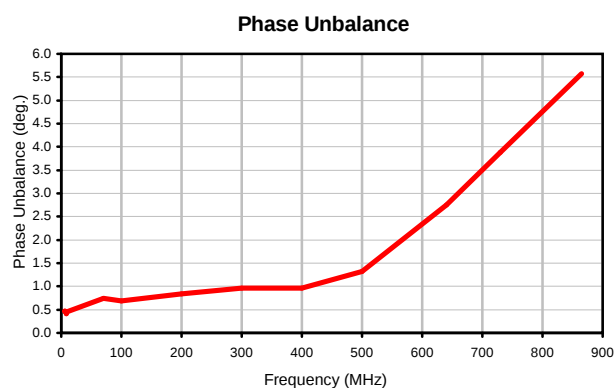
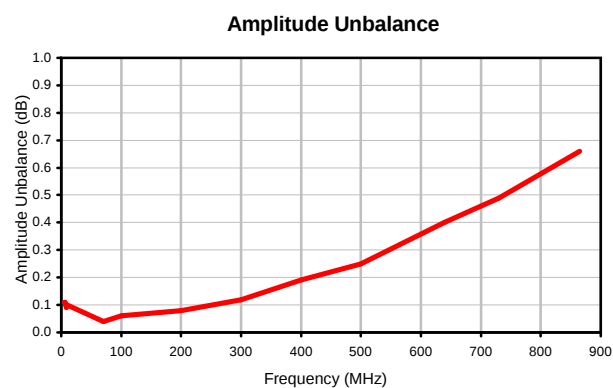
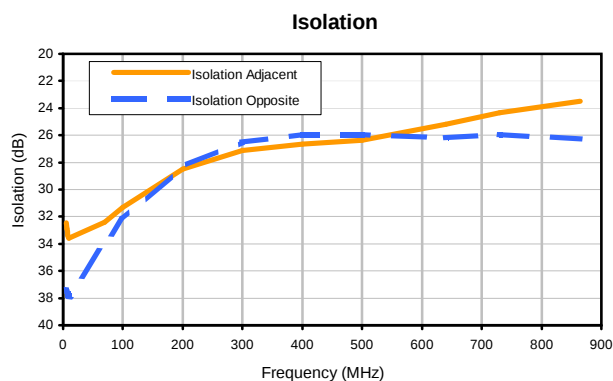
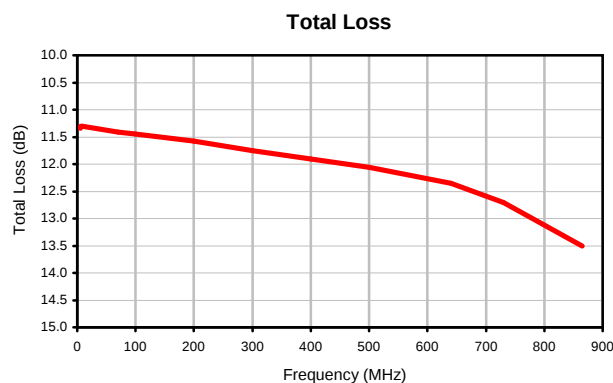
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12 Way-0° Power Splitter/Combiner

ZFSC-12-1W-75

Typical Performance Curves



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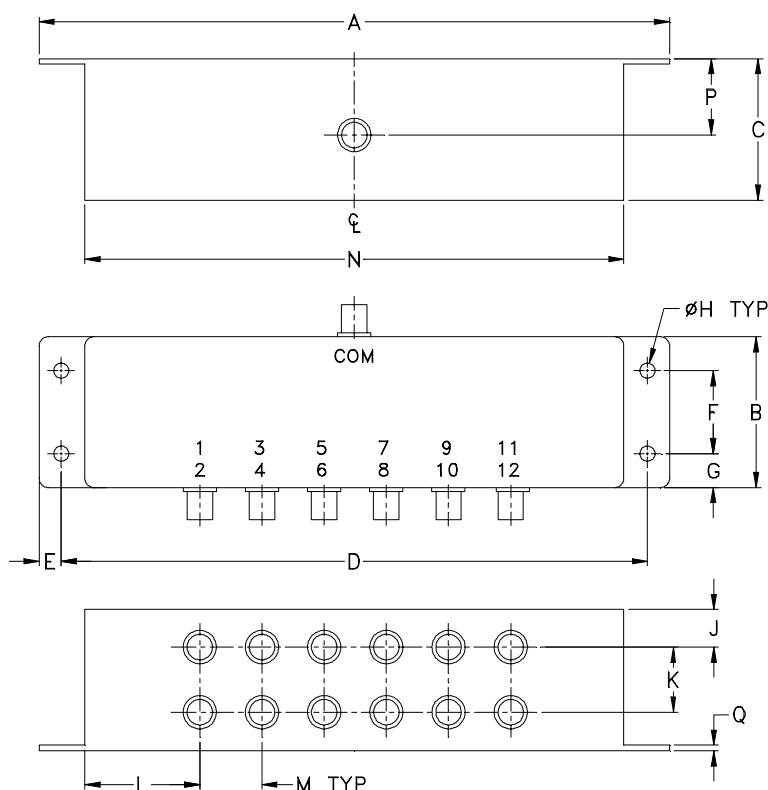
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Outline Dimensions



CASE#	A	B	C	D	E	F	G	H	J	K	L	M	N
R67	6.69 (169.93)	1.60 (40.64)	1.50 (38.10)	6.22 (157.99)	.24 (6.10)	.88 (22.35)	.36 (9.14)	.160 (4.06)	.40 (10.16)	.69 (17.53)	1.22 (30.99)	.66 (16.76)	5.72 (145.29)

CASE#	P	Q	WT. GRAMS
R67	.81 (20.57)	.06 (1.53)	310.0

Dimensions are in inches (mm). Tolerances: 2 Pl. $\pm .03$; 3 Pl. $\pm .015$

Notes:

- Case material: Aluminum alloy.
- Case finish:

For RoHS Case Styles:

Clear chemical conversion coating, non-chrome or trivalent chrome based.



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Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-55° to 100°C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Barometric Pressure	100,000 Feet	MIL-STD-202, Method 105, Condition D
Humidity	90% RH, 65°C Units may require bake-out after humidity to restore full performance.	MIL-STD-202, Method 103
Thermal Shock	-65° to 125°C, 5 cycles	MIL-STD-202, Method 107, Condition B
Vibration (High Frequency)	20g peak, 10-2000 Hz, 12 times in each of three perpendicular directions (total 36)	MIL-STD-202, Method 204, Condition D
Mechanical Shock	100g, 6ms sawtooth, 3 shocks each direction 3 axes (total 18)	MIL-STD-202, Method 213, Condition I