

Non-Catalog Model

Power Splitter/Combiner

ZFSC-48-1-75

48 Way-0°

Important Note

This is a non-catalog model and can be manufactured on specific request.
Pricing and delivery information can be supplied upon request.



Please click "Back", and then click "Contact Us" for Applications support.

CASE STYLE : HH68

ELECTRICAL SPECIFICATIONS 75Ω @ +25°C					
Parameter		Min.	Typ.	Max.	Units
Frequency		10		300	MHz
Isolation	10 - 100 MHz	25	30		dB
	100 - 150 MHz	20	28		dB
	150 - 300 MHz	20	23		dB
Insertion Loss Above 16.8 dB	10 - 100 MHz		1.20	2.00	dB
	100 - 150 MHz		2.10	2.50	dB
	150 - 300 MHz		2.80	4.00	dB
Phase Unbalance	10 - 100 MHz			0.600	deg.
	100 - 150 MHz			0.700	deg.
	150 - 300 MHz			1.000	deg.
Amplitude Unbalance	10 - 100 MHz		0.249		dB
	100 - 150 MHz		0.332		dB
	150 - 300 MHz		0.397		dB
VSWR	SUM Port		1.25		(:1)
	OUT Ports		1.25		(:1)

Notes: Matched power rating: 1 Watt.

Internal load dissipation: 0.87 Watt.

Denotes 75 Ohm model, for coax connector models 75 Ohm BNC connectors are standard.

MAXIMUM RATINGS	
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C

PIN CONNECTIONS	
SUM PORT	S(COM)
PORTS 1, 2, 3, 4 48	1, 2, 3, 4..... 48

Functional Diagram



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Typical Performance Data

FREQ. (MHz)	TOTAL LOSS ¹ (dB)	AMP. UNBAL. (dB)	ISOLATION (dB)		FREQ. (MHz)	VSWR (:1)	
			Adjacent	Opposite		S	OUTPUTS
10.0	17.86	0.27	37.32	48.81	10.0	1.11	1.28
14.0	17.84	0.24	37.48	48.99	14.0	1.12	1.27
18.0	17.86	0.23	37.24	49.05	18.0	1.14	1.27
22.0	17.87	0.22	36.84	48.72	22.0	1.17	1.27
26.0	17.89	0.21	36.32	49.02	26.0	1.20	1.27
30.0	17.90	0.22	35.68	49.04	30.0	1.22	1.27
37.0	17.92	0.22	34.65	49.05	37.0	1.25	1.27
44.0	17.93	0.23	33.62	49.17	44.0	1.28	1.27
51.0	17.97	0.23	32.79	49.22	51.0	1.30	1.26
58.0	17.98	0.24	32.05	49.59	58.0	1.32	1.26
65.0	18.00	0.25	31.32	49.70	65.0	1.33	1.26
72.0	18.00	0.26	30.62	49.62	72.0	1.34	1.25
79.0	18.01	0.28	30.07	49.71	79.0	1.34	1.25
86.0	18.03	0.29	29.57	49.93	86.0	1.35	1.25
93.0	18.08	0.29	29.13	49.88	93.0	1.35	1.25
100.0	18.10	0.30	28.70	49.99	100.0	1.35	1.25
105.0	18.12	0.32	28.44	49.81	105.0	1.35	1.25
110.0	18.13	0.31	28.17	49.88	110.0	1.34	1.24
115.0	18.11	0.34	27.91	49.97	115.0	1.34	1.24
120.0	18.14	0.32	27.72	49.55	120.0	1.33	1.24
125.0	18.14	0.33	27.48	50.05	125.0	1.32	1.23
130.0	18.16	0.33	27.29	49.92	130.0	1.32	1.23
135.0	18.17	0.35	27.11	49.86	135.0	1.31	1.23
140.0	18.19	0.35	26.95	49.99	140.0	1.31	1.22
145.0	18.20	0.35	26.80	49.93	145.0	1.31	1.22
150.0	18.22	0.35	26.65	50.04	150.0	1.30	1.22
160.0	18.25	0.35	26.45	49.58	160.0	1.29	1.22
170.0	18.29	0.35	26.26	49.42	170.0	1.27	1.22
180.0	18.33	0.33	26.13	49.07	180.0	1.25	1.22
190.0	18.34	0.31	26.01	48.52	190.0	1.23	1.23
200.0	18.38	0.30	25.94	48.66	200.0	1.22	1.23
210.0	18.44	0.31	25.88	48.18	210.0	1.21	1.22
220.0	18.48	0.30	25.89	47.45	220.0	1.20	1.22
230.0	18.52	0.31	25.98	47.24	230.0	1.19	1.23
240.0	18.56	0.33	26.09	46.75	240.0	1.18	1.23
250.0	18.62	0.36	26.17	46.57	250.0	1.16	1.24
260.0	18.67	0.43	26.30	45.84	260.0	1.15	1.26
270.0	18.71	0.50	26.44	45.45	270.0	1.16	1.27
280.0	18.75	0.54	26.58	44.94	280.0	1.16	1.27
290.0	18.77	0.61	26.76	44.85	290.0	1.16	1.27
300.0	18.82	0.67	26.93	44.26	300.0	1.15	1.27

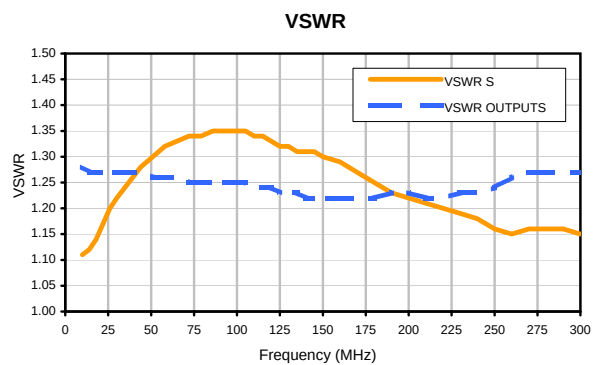
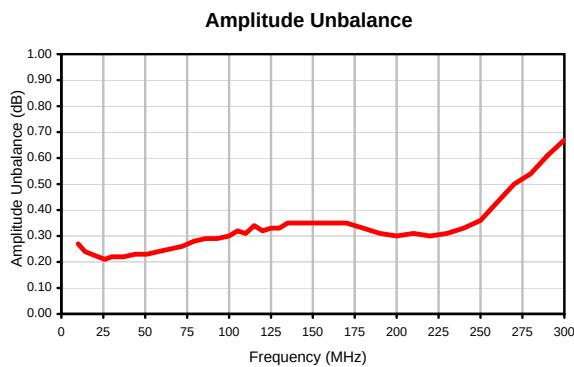
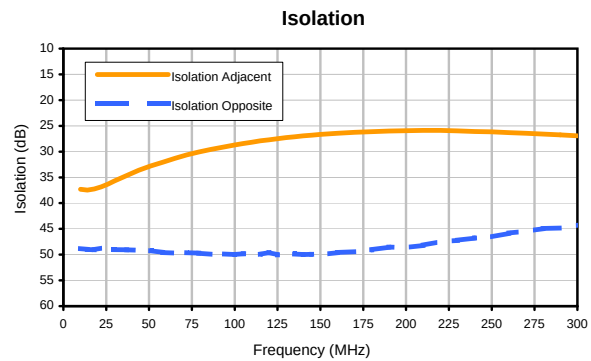
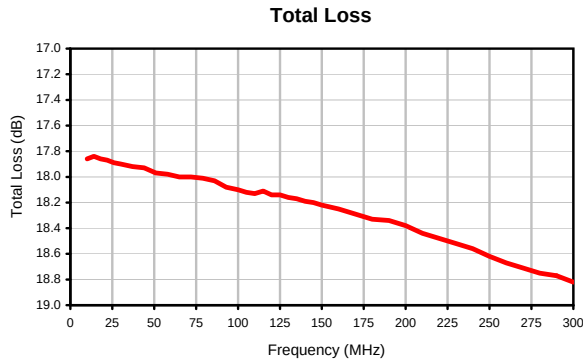
¹ Total Loss = Insertion Loss+ 16.8dB Splitter Loss

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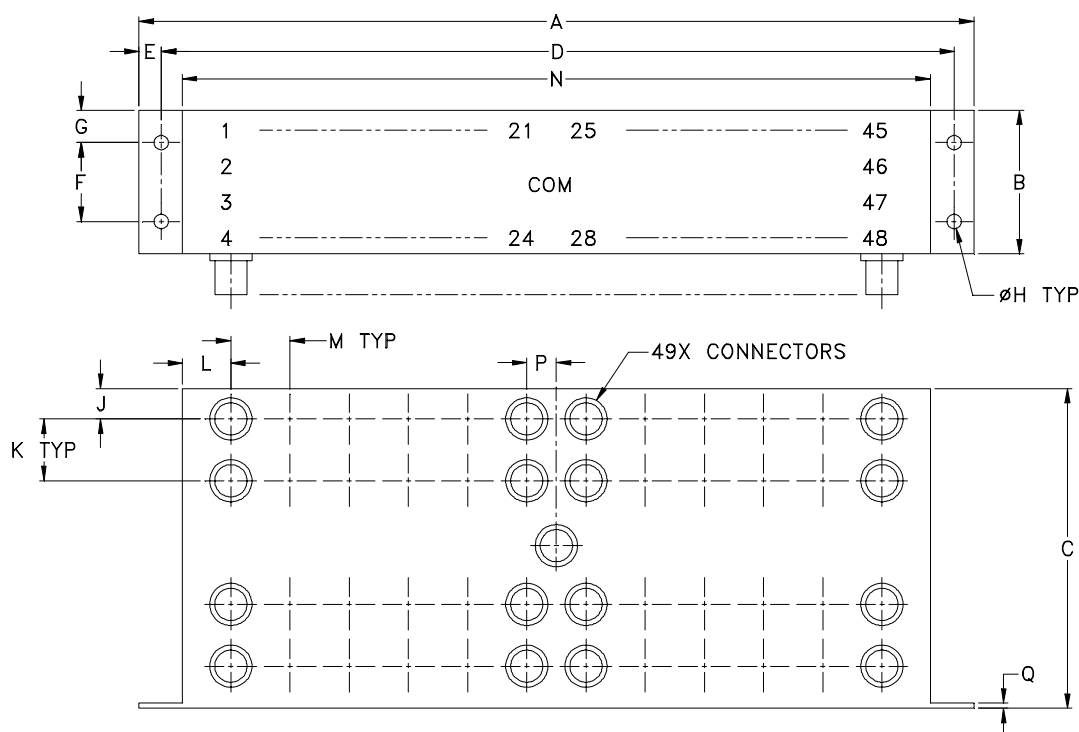
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Typical Performance Curves



Outline Dimensions



CASE#	A	B	C	D	E	F	G	H	J	K	L	M	N
HH68	9.31 (236.47)	1.60 (40.64)	3.57 (90.68)	8.84 (224.54)	.25 (6.35)	.88 (22.35)	.36 (9.14)	.160 (4.06)	.34 (8.64)	.69 (17.53)	.54 (13.72)	.66 (16.76)	8.34 (211.84)

CASE#	P	Q	WT. GRAMS
HH68	.33 (8.38)	.06 (1.52)	1090

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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All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-55° to 85°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