Engineering Development Model

Power Splitter/Combiner with amplifier

2 Way-0°

ZAPD-ED10436/1

Important Note

This model has been designed, built and tested in our engineering department. Performance data represents model capability.
At present it is a non-catalog model. On request, we can supply a final specification sheet, part number and price/delivery information.

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

CASE STYLE : F14

ELECTRICAL SPECIFICATIONS 50Ω @ +25°C					
Parameter		**Min.**	**Typ.**	**Max.**	**Units**
Frequency		1300		1900	MHz
Isolation	**1300 - 1900 MHz**		38		dB
Gain @ 5V	**1300 - 1900 MHz**		6.45		dB
Phase Unbalance	**1300 - 1900 MHz**		4.00		deg.
Amplitude Unbalance	**1300 - 1900 MHz**		0.10		dB
VSWR	**SUM Port**		1.19		(:1)
	OUT Ports		1.29		(:1)
Noise Figure	**1545-1605 MHz**		3.60		dB
DC Power			4.5-5.5		V

MAXIMUM RATINGS	
Operating Temperature	-5°C to 70°C
Storage Temperature	-5°C to 70°C

COAXIAL CONNECTIONS	
ANTENNA IN	S
OUTPUT PROVIDING DC	1
OUTPUT DC BLOCKED	2

Functional Diagram

Typical Performance Data

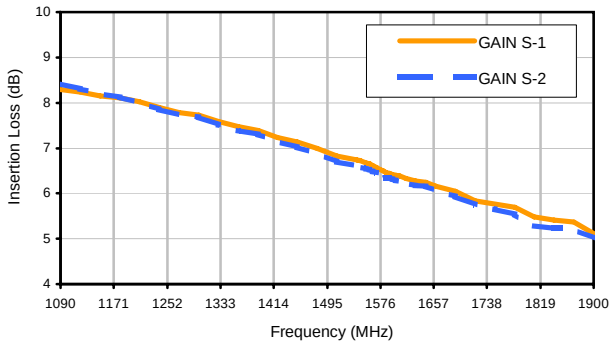
FREQUENCY (MHz)	GAIN (dB) S-1	GAIN (dB) S-2	AMPLITUDE UNBALANCE (dB)	ISOLATION (dB) 1-2	PHASE UNBALANCE (deg.)
1090.00	8.29	8.42	0.13	31.46	4.40
1120.00	8.23	8.30	0.07	31.32	4.30
1150.00	8.15	8.19	0.04	32.87	4.16
1180.00	8.11	8.12	0.01	32.03	4.13
1210.00	8.02	8.01	0.01	33.37	4.13
1240.00	7.90	7.86	0.04	32.88	4.10
1270.00	7.78	7.73	0.05	33.77	3.95
1300.00	7.73	7.68	0.05	33.67	3.95
1330.00	7.59	7.52	0.07	34.35	4.05
1360.00	7.48	7.39	0.09	35.33	4.02
1390.00	7.39	7.30	0.09	34.83	3.93
1420.00	7.23	7.15	0.08	34.73	3.93
1450.00	7.13	7.02	0.11	35.83	3.93
1480.00	7.00	6.88	0.12	35.94	3.85
1510.00	6.82	6.70	0.12	36.94	3.92
1540.00	6.74	6.61	0.13	37.23	3.86
1545.00	6.72	6.61	0.11	38.47	3.85
1550.00	6.70	6.57	0.13	36.96	3.80
1555.00	6.67	6.54	0.13	36.66	3.87
1560.00	6.66	6.53	0.13	37.41	3.80
1565.00	6.61	6.49	0.12	37.75	3.78
1570.00	6.57	6.45	0.12	38.65	3.80
1575.00	6.53	6.41	0.12	37.87	3.77
1580.00	6.50	6.41	0.09	37.52	3.79
1585.00	6.45	6.34	0.11	38.42	3.76
1590.00	6.44	6.34	0.10	37.13	3.77
1595.00	6.42	6.32	0.10	37.59	3.84
1600.00	6.40	6.29	0.11	39.07	3.91
1605.00	6.38	6.28	0.10	38.19	3.91
1615.00	6.33	6.23	0.10	38.81	3.90
1630.00	6.28	6.17	0.11	38.49	3.95
1645.00	6.25	6.16	0.09	38.59	3.92
1660.00	6.16	6.06	0.10	39.65	4.16
1690.00	6.05	5.94	0.11	39.16	4.12
1720.00	5.84	5.75	0.09	40.70	4.19
1750.00	5.76	5.65	0.11	41.95	4.42
1780.00	5.70	5.54	0.16	42.31	4.56
1810.00	5.48	5.28	0.20	40.78	4.45
1840.00	5.41	5.23	0.18	42.54	3.98
1870.00	5.37	5.22	0.15	40.23	4.02
1900.00	5.12	5.01	0.11	40.57	3.93

FREQUENCY (MHz)	VSWR (:1) S	VSWR (:1) 1	VSWR (:1) 2
1090.00	1.11	1.12	1.21
1120.00	1.09	1.14	1.23
1150.00	1.07	1.15	1.23
1180.00	1.06	1.16	1.23
1210.00	1.04	1.17	1.23
1240.00	1.04	1.19	1.24
1270.00	1.04	1.20	1.25
1300.00	1.06	1.21	1.24
1330.00	1.07	1.23	1.24
1360.00	1.09	1.25	1.25
1390.00	1.10	1.26	1.24
1420.00	1.12	1.27	1.24
1450.00	1.14	1.29	1.24
1480.00	1.15	1.30	1.24
1510.00	1.16	1.30	1.22
1540.00	1.18	1.31	1.23
1545.00	1.18	1.32	1.23
1550.00	1.19	1.32	1.23
1555.00	1.19	1.32	1.23
1560.00	1.19	1.33	1.23
1565.00	1.19	1.33	1.23
1570.00	1.19	1.33	1.23
1575.00	1.19	1.33	1.23
1580.00	1.20	1.33	1.23
1585.00	1.20	1.33	1.23
1590.00	1.20	1.33	1.22
1595.00	1.20	1.34	1.23
1600.00	1.21	1.34	1.23
1605.00	1.21	1.33	1.22
1615.00	1.21	1.33	1.22
1630.00	1.21	1.34	1.23
1645.00	1.22	1.35	1.23
1660.00	1.23	1.35	1.24
1690.00	1.23	1.37	1.25
1720.00	1.24	1.36	1.25
1750.00	1.24	1.38	1.27
1780.00	1.25	1.40	1.28
1810.00	1.25	1.41	1.30
1840.00	1.26	1.40	1.32
1870.00	1.25	1.42	1.33
1900.00	1.26	1.43	1.33

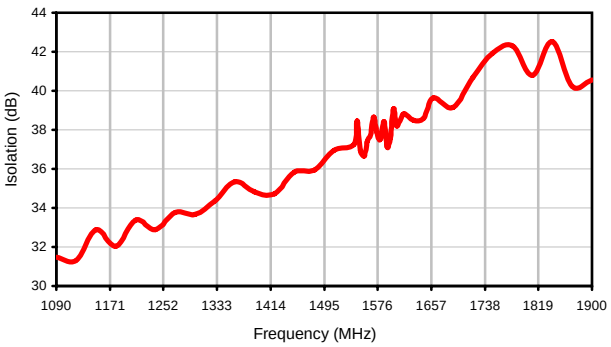
FREQUENCY (MHz)	NOISE FIGURE (dB)
1545.00	3.55
1547.00	3.54
1549.00	3.56
1551.00	3.54
1553.00	3.56
1555.00	3.56
1557.00	3.54
1559.00	3.57
1561.00	3.51
1563.00	3.54
1565.00	3.53
1567.00	3.52
1569.00	3.57
1571.00	3.64
1573.00	3.61
1575.00	3.59
1577.00	3.62
1579.00	3.65
1581.00	3.61
1583.00	3.62
1585.00	3.64
1587.00	3.59
1589.00	3.58
1591.00	3.54
1593.00	3.57
1595.00	3.54
1597.00	3.59
1599.00	3.57
1601.00	3.99
1603.00	3.97
1605.00	3.95

Typical Performance Curves

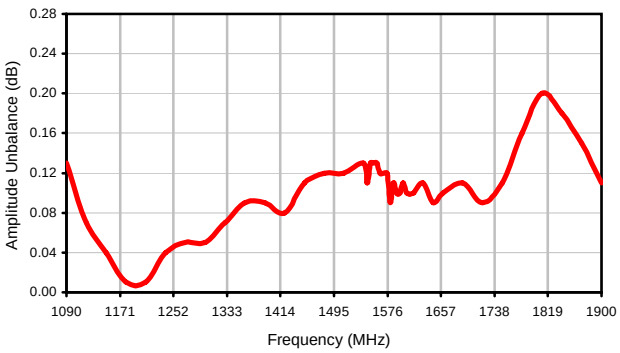
GAIN @ 5V



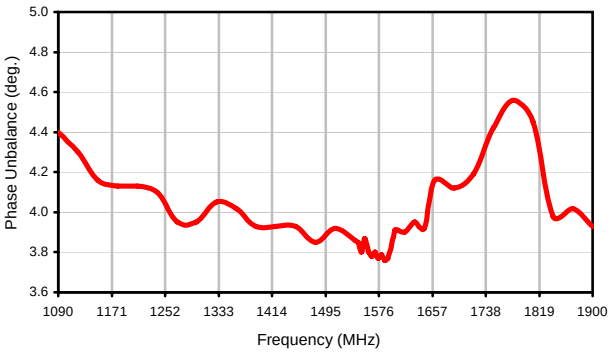
Isolation @ 5V



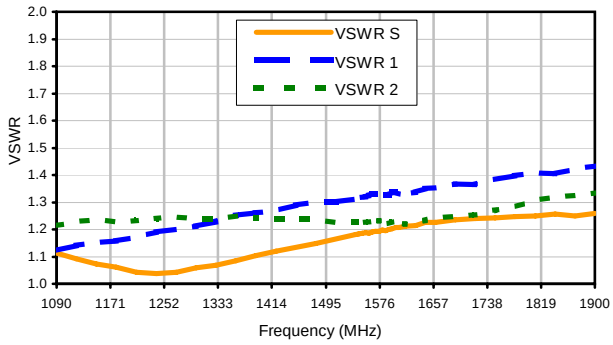
Amplitude Unbalance @ 5V



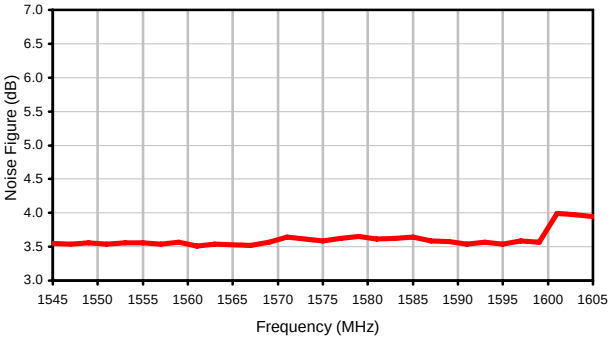
Phase Unbalance @ 5V



VSWR @ 5V



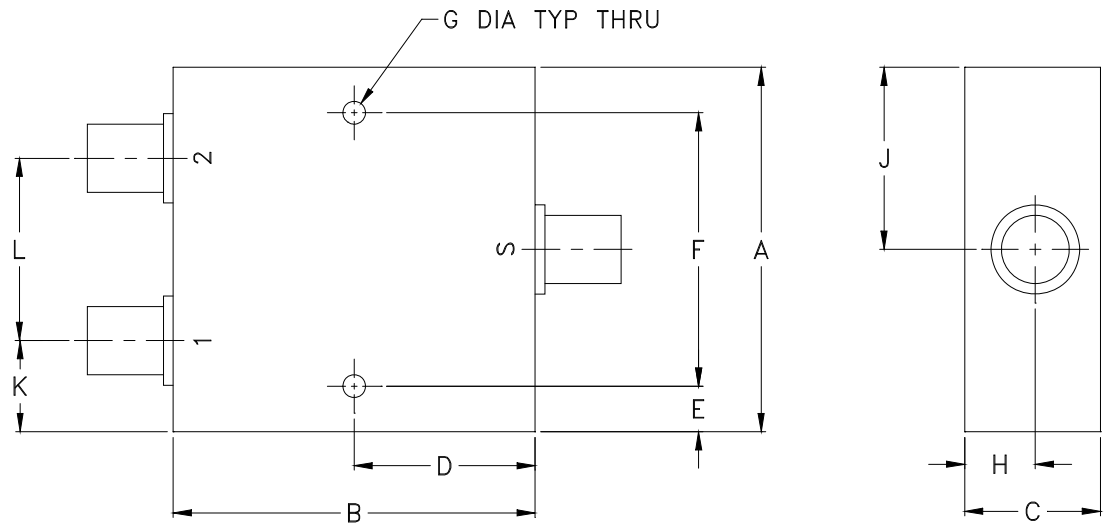
NOISE FIGURE @ 5V



Case Style F

F14

Outline Dimensions



CASE #	A	B	C	D	E	F	G	H	J	K	L	WT. GRAM
F14	2.00 (50.80)	2.00 (50.80)	.75 (19.05)	1.00 (25.40)	.25 (6.35)	1.500 (38.10)	.125 (3.18)	.39 (9.91)	1.00 (25.40)	.50 (12.70)	1.00 (25.40)	170.0

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

Notes:

1. Case material: Aluminum alloy.
2. Case finish:
   For RoHS Case Styles: Clear chemical conversion coating, non-chrome or trivalent chrome based.
3. Refer to the individual model data sheet for the type of connectors available.

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