

Engineering Development Model

Power Splitter/Combiner

Z99SC-ED11451/1

2 Way-0°

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 : F183

ELECTRICAL SPECIFICATIONS 50Ω @ +25°C				
Parameter		Min.	Typ.	Max. Units
Frequency		0.2		650 MHz
Isolation	0.2 - 2 MHz		25	dB
	2 - 325 MHz		25	dB
	325 - 650 MHz		13	dB
Insertion Loss Above 3.0 dB	0.2 - 2 MHz		0.20	dB
	2 - 325 MHz		0.40	dB
	325 - 650 MHz		1.05	dB
Phase Unbalance	0.2 - 2 MHz		0.032	deg.
	2 - 325 MHz		0.597	deg.
	325 - 650 MHz		2.785	deg.
Amplitude Unbalance	0.2 - 2 MHz		0.000	dB
	2 - 325 MHz		0.009	dB
	325 - 650 MHz		0.101	dB
VSWR	SUM Port		1.30	(:1)
	OUT Ports		1.20	(:1)

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

PIN CONNECTIONS	
SUM PORT	S
PORT 1	1
PORT 2	2

Functional Diagram



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Typical Performance Data

FREQ. (MHz)	TOTAL LOSS ¹ (dB)		AMP. UNBAL. (dB)	ISOLATION (dB) 1-2	PHASE UNBAL. (deg.)	FREQ. (MHz)	VSWR (:1)		
	S-1	S-2					S	1	2
0.2	3.21	3.21	0.00	20.85	0.06	0.2	1.29	1.53	1.53
0.3	3.20	3.20	0.00	23.97	0.06	0.3	1.19	1.33	1.33
0.4	3.19	3.19	0.00	26.04	0.02	0.4	1.15	1.25	1.25
0.5	3.20	3.19	0.00	27.49	0.01	0.5	1.12	1.20	1.20
0.6	3.20	3.20	0.00	28.51	0.04	0.6	1.11	1.17	1.17
0.7	3.19	3.20	0.00	29.28	0.04	0.7	1.10	1.15	1.15
0.8	3.20	3.20	0.00	29.86	0.01	0.8	1.09	1.14	1.14
0.9	3.20	3.20	0.00	30.34	0.04	0.9	1.09	1.13	1.13
1.0	3.20	3.20	0.00	30.70	0.01	1.0	1.08	1.12	1.12
3.0	3.16	3.16	0.00	34.38	0.04	3.0	1.06	1.06	1.07
5.0	3.15	3.15	0.00	35.56	0.04	5.0	1.05	1.05	1.05
7.0	3.15	3.14	0.00	35.87	0.06	7.0	1.05	1.04	1.04
9.0	3.16	3.16	0.00	35.87	0.10	9.0	1.05	1.04	1.04
11.0	3.16	3.15	0.00	35.68	0.07	11.0	1.05	1.04	1.04
14.0	3.16	3.16	0.00	35.35	0.06	14.0	1.05	1.04	1.04
15.0	3.16	3.16	0.00	35.20	0.08	15.0	1.05	1.04	1.04
16.0	3.16	3.15	0.00	35.04	0.11	16.0	1.05	1.04	1.04
45.0	3.19	3.19	0.01	30.95	0.18	45.0	1.07	1.04	1.04
74.0	3.22	3.22	0.00	27.92	0.40	74.0	1.09	1.04	1.04
103.0	3.24	3.23	0.01	25.66	0.60	103.0	1.12	1.04	1.04
132.0	3.28	3.27	0.01	23.87	0.77	132.0	1.15	1.04	1.04
161.0	3.30	3.29	0.01	22.35	0.96	161.0	1.19	1.04	1.05
190.0	3.33	3.32	0.01	21.09	1.18	190.0	1.22	1.04	1.05
219.0	3.38	3.35	0.02	20.00	1.31	219.0	1.25	1.05	1.06
248.0	3.42	3.39	0.02	19.05	1.46	248.0	1.29	1.06	1.07
277.0	3.45	3.42	0.03	18.20	1.58	277.0	1.33	1.06	1.07
306.0	3.50	3.46	0.04	17.45	1.75	306.0	1.37	1.07	1.08
350.0	3.57	3.52	0.05	16.43	2.00	350.0	1.43	1.09	1.09
375.0	3.62	3.56	0.06	15.91	2.18	375.0	1.46	1.10	1.11
400.0	3.68	3.61	0.06	15.44	2.29	400.0	1.50	1.12	1.12
425.0	3.71	3.64	0.07	15.00	2.36	425.0	1.54	1.13	1.13
450.0	3.75	3.67	0.09	14.58	2.54	450.0	1.57	1.15	1.14
475.0	3.83	3.72	0.11	14.23	2.71	475.0	1.61	1.16	1.15
500.0	3.88	3.76	0.12	13.86	2.75	500.0	1.65	1.18	1.17
525.0	3.90	3.80	0.10	13.49	2.88	525.0	1.70	1.20	1.18
550.0	3.97	3.85	0.12	13.19	3.08	550.0	1.74	1.21	1.19
575.0	4.05	3.93	0.12	12.92	3.14	575.0	1.79	1.24	1.21
600.0	4.09	3.97	0.12	12.61	3.30	600.0	1.83	1.26	1.23
625.0	4.14	4.01	0.13	12.33	3.48	625.0	1.88	1.28	1.25
650.0	4.24	4.08	0.16	12.14	3.50	650.0	1.93	1.30	1.27

¹ Total Loss = Insertion Loss + 3dB Splitter Loss

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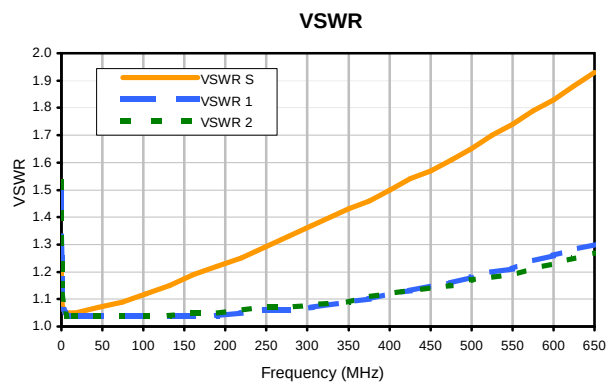
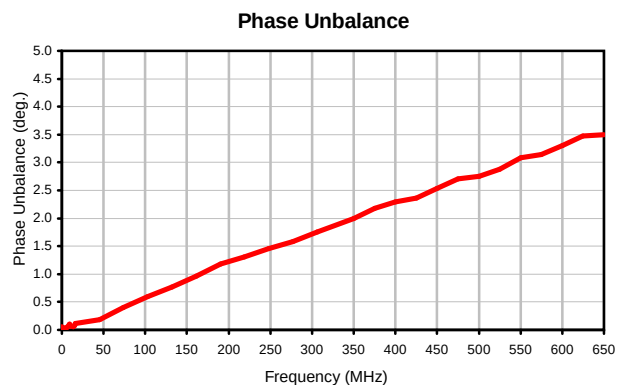
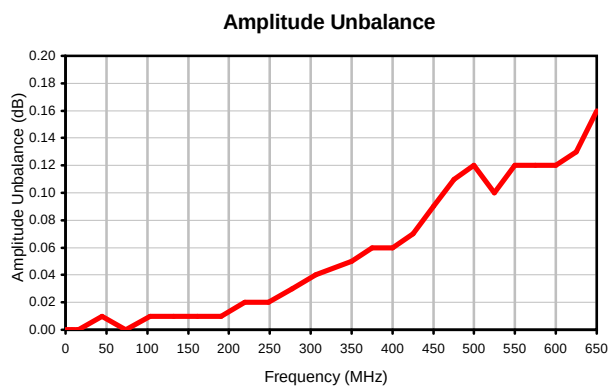
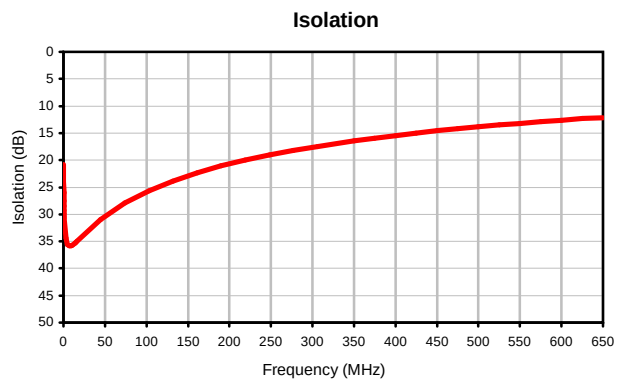
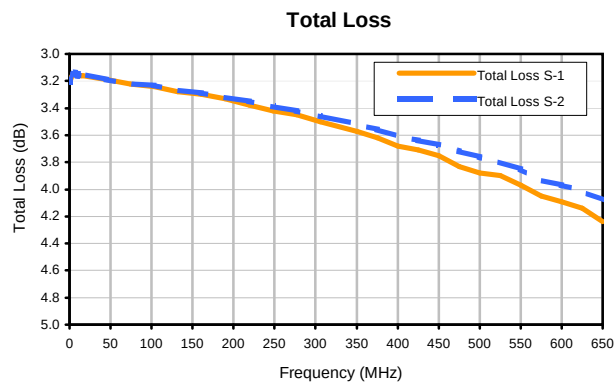
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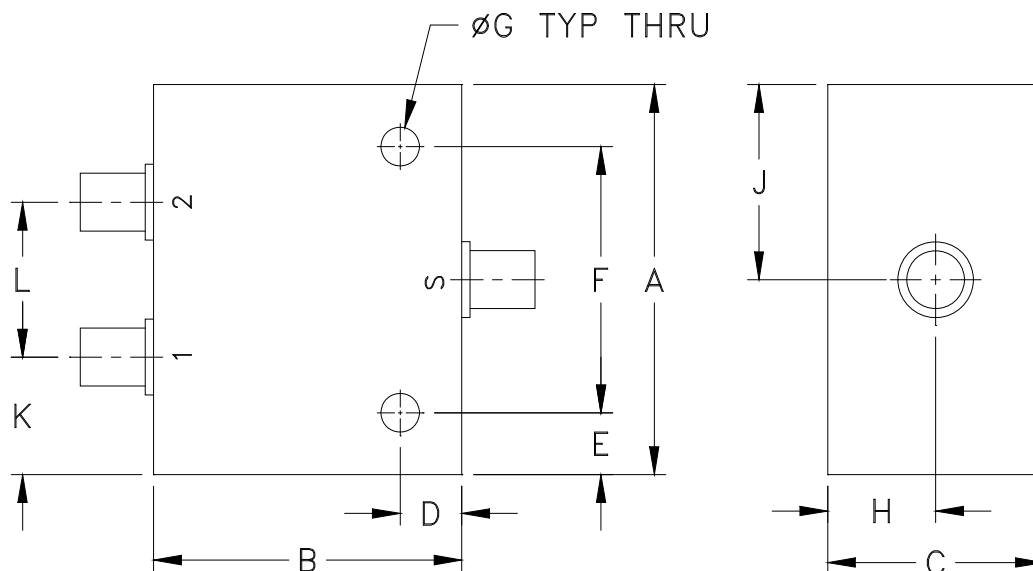
Typical Performance Curves



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Outline Dimensions

F183



CASE #	A	B	C	D	E	F	G	H	J	K	L	WT. GRAM
F183	1.26 (32.00)	1.00 (25.40)	.70 (17.78)	.20 (5.08)	.200 (5.08)	.860 (21.84)	.125 (3.18)	.35 (8.89)	.63 (16.00)	.38 (9.65)	.50 (12.70)	24.0

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

Notes:

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



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