Engineering Development Model

Power Splitter/Combiner ZB3PD1-ED10073/1

3 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 : UU188

ELECTRICAL SPECIFICATIONS 50Ω @ +25°C					
Parameter		**Min.**	**Typ.**	**Max.**	**Units**
Frequency		645		1000	MHz
Isolation	**645 - 1000 MHz**		32		dB
Insertion Loss Above 4.8 dB	**645 - 1000 MHz**		1.20		dB
Phase Unbalance	**645 - 1000 MHz**		0.335		deg.
Amplitude Unbalance	**645 - 1000 MHz**		0.051		dB
VSWR	**SUM Port**		1.20		(:1)
	OUT Ports		1.20		(:1)

MAXIMUM RATINGS	
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C

PIN CONNECTIONS	
SUM PORT	S
PORT 1	1
PORT 2	2
PORT 3	Not Used
PORT 4	3

Functional Diagram

3 Way-0° Power Splitter/Combiner ZB3PD1-ED10073/1

Typical Performance Data

FREQ. (MHz)	TOTAL LOSS[1] (dB)			AMP. UNBAL. (dB)	ISOLATION (dB)			PHASE UNBAL. (deg.)
	S-1	S-2	S-3		1-2	1-3	2-3	
645.0	4.99	4.96	5.01	0.05	21.31	19.11	21.83	0.26
656.0	4.98	4.94	5.00	0.06	21.95	19.55	22.54	0.20
667.0	4.96	4.93	4.98	0.05	22.66	20.01	23.29	0.26
678.0	4.96	4.92	4.97	0.05	23.43	20.50	24.14	0.23
689.0	4.93	4.91	4.95	0.04	24.27	21.03	25.08	0.27
700.0	4.93	4.90	4.94	0.05	25.21	21.58	26.14	0.23
711.0	4.93	4.90	4.94	0.04	26.28	22.19	27.35	0.23
722.0	4.92	4.90	4.94	0.04	27.50	22.85	28.76	0.17
733.0	4.92	4.91	4.94	0.04	28.93	23.58	30.47	0.18
744.0	4.90	4.90	4.94	0.04	30.63	24.34	32.59	0.15
755.0	4.90	4.89	4.93	0.04	32.76	25.23	35.39	0.22
765.0	4.91	4.90	4.94	0.04	35.31	26.10	39.10	0.19
775.0	4.91	4.90	4.94	0.04	38.92	27.09	45.41	0.17
785.0	4.91	4.91	4.95	0.04	44.96	28.19	52.69	0.23
795.0	4.91	4.91	4.95	0.04	52.57	29.48	42.79	0.29
805.0	4.92	4.93	4.96	0.04	43.13	31.00	37.60	0.20
810.0	4.92	4.93	4.97	0.05	40.13	31.87	35.89	0.24
817.0	4.92	4.94	4.97	0.04	37.13	33.26	33.88	0.23
824.0	4.93	4.94	4.97	0.04	34.87	34.85	32.25	0.21
831.0	4.94	4.96	4.98	0.04	33.14	36.87	30.89	0.27
838.0	4.95	4.96	4.99	0.05	31.66	39.41	29.71	0.26
845.0	4.96	4.97	4.99	0.04	30.39	42.88	28.67	0.30
852.0	4.96	4.98	5.00	0.05	29.28	47.78	27.75	0.31
859.0	4.96	4.99	5.01	0.05	28.28	49.89	26.88	0.30
866.0	4.96	4.99	5.01	0.05	27.40	45.02	26.15	0.29
876.0	4.98	5.02	5.03	0.05	26.31	39.53	25.16	0.36
886.0	4.99	5.04	5.04	0.05	25.32	36.02	24.27	0.38
896.0	5.00	5.06	5.05	0.05	24.47	33.54	23.48	0.35
906.0	5.02	5.07	5.06	0.05	23.67	31.57	22.78	0.42
916.0	5.04	5.08	5.08	0.04	22.93	29.99	22.12	0.45
926.0	5.05	5.08	5.09	0.03	22.26	28.66	21.50	0.42
936.0	5.08	5.12	5.12	0.04	21.66	27.52	20.94	0.41
946.0	5.09	5.14	5.12	0.05	21.10	26.50	20.42	0.48
956.0	5.09	5.15	5.13	0.06	20.56	25.58	19.91	0.46
966.0	5.09	5.17	5.13	0.08	20.07	24.74	19.43	0.47
972.0	5.11	5.18	5.14	0.08	19.80	24.30	19.17	0.55
978.0	5.12	5.20	5.15	0.08	19.53	23.88	18.92	0.59
984.0	5.12	5.21	5.16	0.09	19.26	23.46	18.66	0.60
990.0	5.14	5.22	5.16	0.08	19.02	23.08	18.42	0.63
996.0	5.15	5.23	5.17	0.08	18.78	22.71	18.20	0.63
1000.0	5.16	5.23	5.18	0.07	18.62	22.48	18.04	0.63

FREQ. (MHz)	VSWR (:1)			
	S	1	2	3
645.0	1.51	1.06	1.08	1.06
656.0	1.48	1.05	1.07	1.06
667.0	1.44	1.05	1.07	1.06
678.0	1.40	1.05	1.07	1.06
689.0	1.36	1.05	1.07	1.06
700.0	1.33	1.05	1.07	1.06
711.0	1.29	1.05	1.07	1.06
722.0	1.26	1.05	1.07	1.06
733.0	1.23	1.05	1.07	1.06
744.0	1.19	1.05	1.07	1.06
755.0	1.16	1.05	1.07	1.06
765.0	1.14	1.05	1.07	1.05
775.0	1.11	1.05	1.07	1.06
785.0	1.09	1.05	1.07	1.06
795.0	1.06	1.05	1.07	1.06
805.0	1.05	1.05	1.07	1.06
810.0	1.05	1.05	1.07	1.06
817.0	1.05	1.05	1.07	1.06
824.0	1.06	1.05	1.08	1.06
831.0	1.07	1.05	1.08	1.06
838.0	1.09	1.05	1.08	1.06
845.0	1.10	1.05	1.08	1.06
852.0	1.12	1.05	1.08	1.06
859.0	1.14	1.05	1.09	1.06
866.0	1.16	1.05	1.09	1.06
876.0	1.19	1.05	1.09	1.06
886.0	1.22	1.05	1.10	1.07
896.0	1.25	1.06	1.10	1.07
906.0	1.28	1.06	1.11	1.07
916.0	1.31	1.06	1.11	1.07
926.0	1.35	1.06	1.11	1.08
936.0	1.38	1.07	1.12	1.08
946.0	1.41	1.07	1.12	1.08
956.0	1.45	1.07	1.13	1.09
966.0	1.48	1.08	1.14	1.10
972.0	1.51	1.08	1.14	1.10
978.0	1.53	1.09	1.14	1.10
984.0	1.55	1.09	1.15	1.11
990.0	1.57	1.09	1.15	1.11
996.0	1.60	1.09	1.15	1.11
1000.0	1.61	1.10	1.16	1.11

[1] Total Loss = Insertion Loss + 4.8dB Splitter Loss

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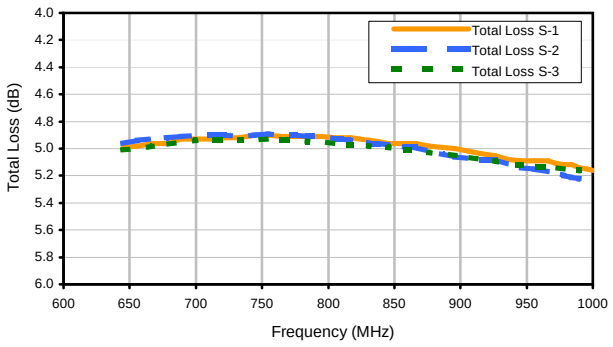
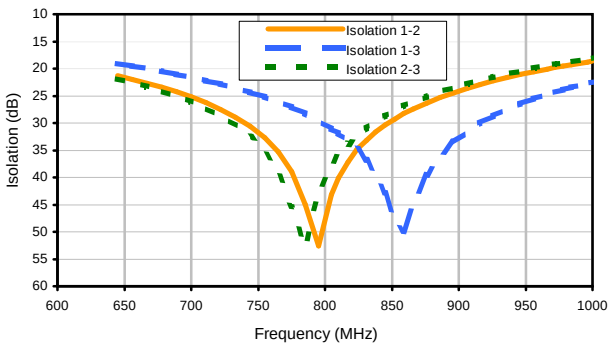
Typical Performance Curves

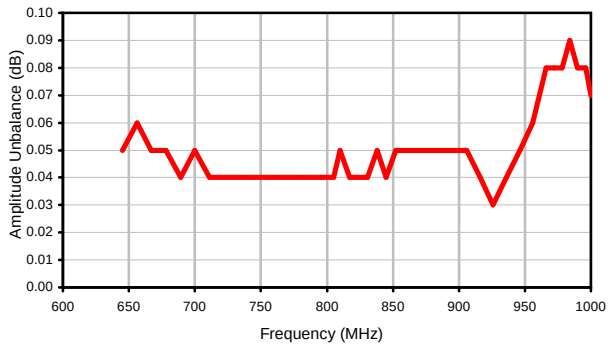
Total Loss



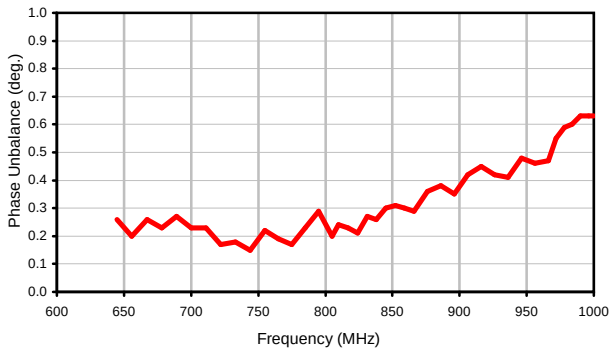
Isolation



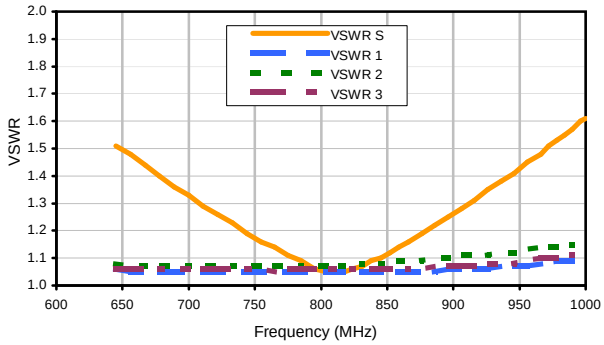
Amplitude Unbalance



Phase Unbalance



VSWR



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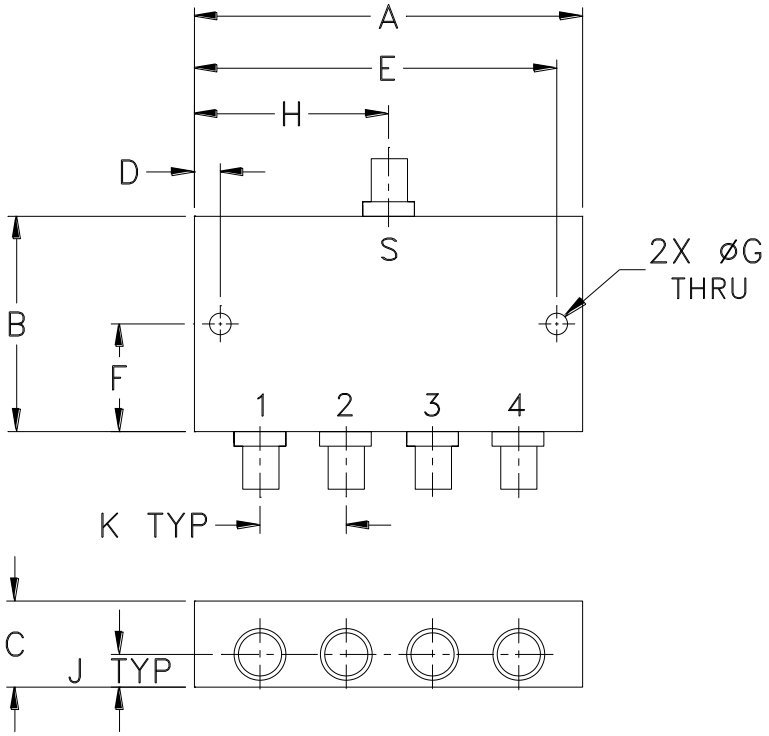
Case Style UU

Outline Dimensions UU188



CASE#	A	B	C	D	E	F	G	H	J	K	WT. GRAMS
UU188	3.50 (88.90)	2.13 (54.10)	.88 (22.35)	.150 (3.81)	3.350 (85.09)	1.06 (26.92)	.125 (3.18)	1.75 (44.45)	.44 (11.18)	.89 (22.61)	260

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