

Non-Catalog Model

Directional Coupler

ZMDC-15-6

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 : M21

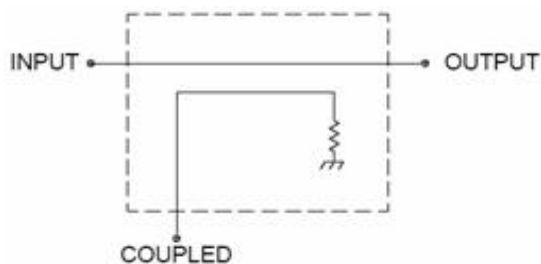
ELECTRICAL SPECIFICATIONS 50Ω @ +25°C					
Parameter		Min.	Typ.	Max.	Units
Frequency		0.1		35	MHz
Coupling	Nominal		15 ± 0.5		dB
	Flatness		± 0.5		dB
Mainline Loss *	0.1-1 MHz		0.40	0.60	dB
	1-17.5 MHz		0.20	0.40	dB
	17.5-35 MHz		0.40	0.60	dB
Directivity	0.1-1 MHz	30	38		dB
	1-17.5 MHz	25	35		dB
	17.5-35 MHz	20	28		dB
VSWR			1.2		(:1)
Power Input	0.1-1 MHz		2.0		W
	1-35 MHz		4.0		W

Notes: * Mainline loss includes theoretical coupled power loss of 0.140 dB at 15 dB coupling.

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

PIN CONNECTIONS	
INPUT	3
OUTPUT	2
COUPLED FORWARD	1

Functional Diagram



Directional Coupler

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Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	COUPLING (dB)	DIRECTIVITY (dB)	RETURN LOSS		
				IN	OUT	CPL
0.1	0.16	14.87	39.49	34.72	35.66	34.91
0.2	0.16	14.87	39.43	35.17	35.80	35.12
0.3	0.17	14.87	39.38	35.26	35.85	35.16
0.4	0.16	14.87	39.43	35.24	35.84	35.15
0.5	0.17	14.87	39.62	35.23	35.85	35.14
0.6	0.17	14.88	39.58	35.21	35.88	35.12
0.7	0.17	14.87	39.57	35.18	35.92	35.10
0.8	0.17	14.87	39.43	35.20	35.95	35.07
0.9	0.17	14.88	39.44	35.14	35.98	35.07
1.0	0.17	14.87	39.42	35.12	36.00	35.02
2.0	0.17	14.88	39.45	34.85	36.35	34.19
3.0	0.17	14.88	39.49	34.69	36.62	32.81
4.0	0.18	14.89	39.67	34.55	36.83	31.32
5.0	0.18	14.89	39.67	34.48	37.05	29.90
6.0	0.18	14.89	40.02	34.41	37.27	28.60
7.0	0.18	14.90	40.08	34.37	37.46	27.43
8.0	0.19	14.90	40.08	34.34	37.65	26.37
9.0	0.19	14.91	39.93	34.33	37.88	25.41
10.0	0.19	14.91	40.21	34.31	38.07	24.54
11.0	0.20	14.92	40.29	34.31	38.31	23.75
12.0	0.20	14.92	39.81	34.31	38.52	23.02
13.0	0.20	14.93	39.74	34.36	38.70	22.34
14.0	0.20	14.93	39.76	34.39	38.93	21.71
15.0	0.20	14.94	38.87	34.42	39.20	21.12
16.0	0.21	14.95	38.35	34.50	39.41	20.58
17.0	0.21	14.96	37.96	34.54	39.68	20.06
18.0	0.21	14.96	36.94	34.56	39.93	19.57
19.0	0.21	14.97	36.12	34.63	40.23	19.11
20.0	0.21	14.97	35.38	34.73	40.61	18.67
21.0	0.22	14.99	34.75	34.75	40.90	18.26
22.0	0.22	14.99	33.95	34.82	41.26	17.86
23.0	0.22	14.99	33.08	34.92	41.51	17.49
24.0	0.23	15.01	32.34	35.03	41.88	17.13
25.0	0.23	15.00	31.56	35.12	42.22	16.79
26.0	0.23	15.02	30.81	35.21	42.64	16.46
27.0	0.23	15.02	30.24	35.29	43.05	16.13
28.0	0.23	15.03	29.58	35.38	43.47	15.83
29.0	0.23	15.04	28.82	35.51	43.76	15.53
30.0	0.24	15.04	28.16	35.61	44.07	15.26
31.0	0.24	15.05	27.54	35.68	44.37	14.98
35.0	0.25	15.09	25.30	35.97	45.07	13.97

REV. X1
ZMDC-15-6
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Page 1 of 1



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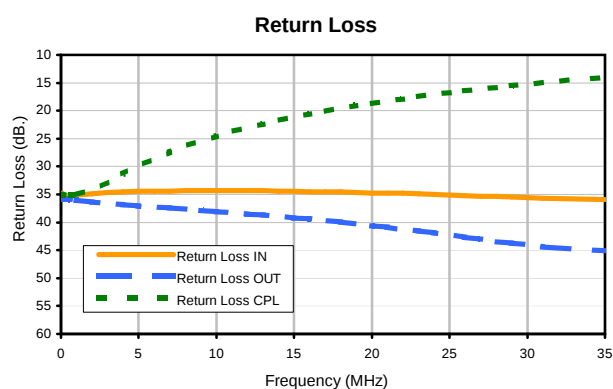
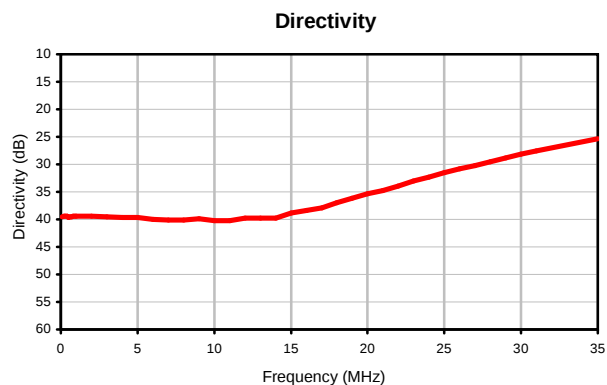
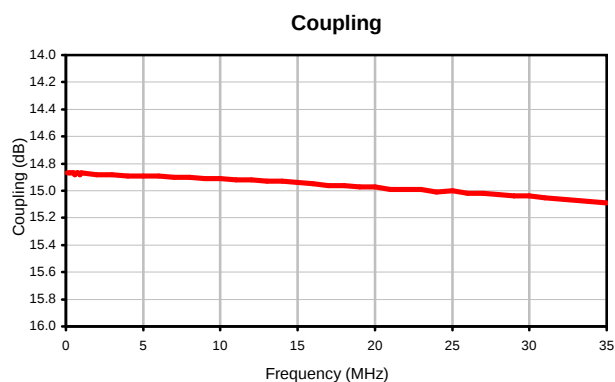
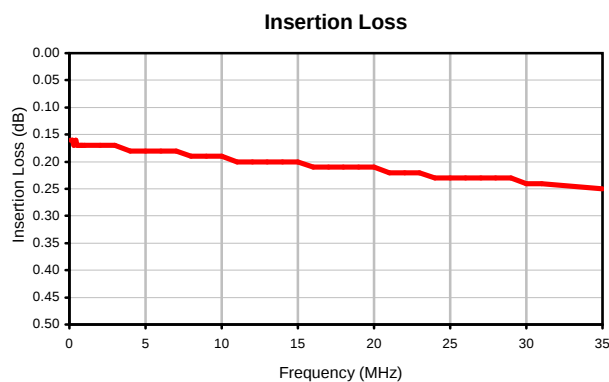
The Design Engineers Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see



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Typical Performance Curves

ZMDC-15-6

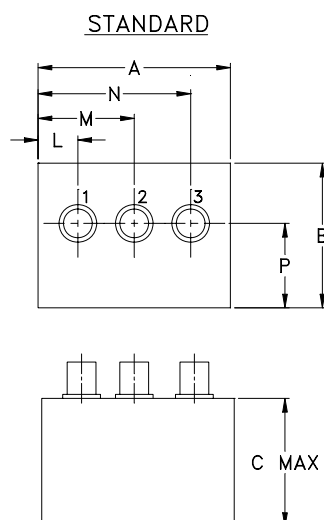


Outline Dimensions

M21

M22

M23



CASE#	A	B	C	D	E	F	G	H	J	K	L	M	N
M21	1.50 (38.10)	1.13 (28.70)	1.00 (25.40)	.50 (12.70)	.155 (3.94)	2.345 (59.56)	.138 (3.51)	.987 (25.07)	2.50 (63.50)	.10 (2.54)	.31 (7.87)	.75 (19.05)	1.19 (30.23)
M22	2.25 (57.15)	1.38 (35.05)	1.24 (31.50)		.150 (3.81)	3.100 (78.74)		1.238 (31.45)	3.25 (82.55)		.40 (10.16)	1.15 (29.21)	1.86 (47.24)
M23	2.25 (57.15)	1.38 (35.05)	1.24 (31.50)		.150 (3.81)	3.100 (78.74)		1.238 (31.45)	3.25 (82.55)		.63 (16.00)	1.06 (26.92)	1.63 (41.40)

CASE#	P	Q	R	S	WT. GRAMS
M21	.66 (16.76)	--	--	.150 (3.81)	40.0
M22	.64 (16.26)	--	--		74.0
M23	.69 (17.53)	--	--		70.0

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.
 - For Non-RoHS Case Styles: Yellow hexavalent chrome based conversion coating.

Due to transition from non-RoHS to RoHS, models will be supplied with either case style finish until the non-RoHS case inventory is depleted.
- Mounting bracket available on request. For bracket mounted on connector end add suffix B to part number and add \$5.00 to unit cost. For bracket mounted on the rear, add suffix BR to part number and add \$1.50 to unit cost.