

Non-Catalog Model

Directional Coupler

ZMDC-10-2

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

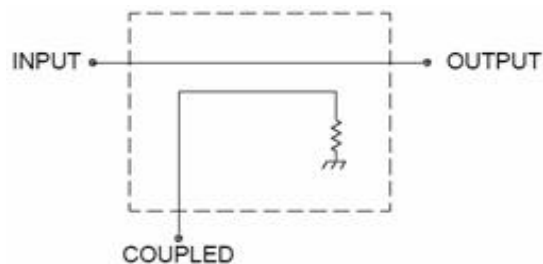
ELECTRICAL SPECIFICATIONS 50Ω @ +25°C				
Parameter		Min.	Typ.	Max. Units
Frequency		250		1000 MHz
Coupling	Nominal		10.5 ± 0.5	dB
	Flatness		± 0.5	dB
Mainline Loss *	250-500 MHz		1.10	1.40 dB
	500-1000 MHz		1.60	1.90 dB
Directivity	250-500 MHz	30	40	dB
	500-1000 MHz	15	20	dB
VSWR			1.5	(:1)
Power Input	500-1000 MHz		5.0	W

Notes: * Mainline loss includes theoretical coupled power loss of 0.405 dB at 10.5 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	(dB) OUT	CPL
250.0	1.54	11.05	54.80	26.03	17.11	18.01
371.6	1.59	11.08	37.67	24.40	16.72	18.06
493.2	1.59	11.07	31.15	24.21	16.77	18.34
500.0	1.59	11.07	30.80	24.23	16.78	18.35
513.5	1.60	11.07	30.26	24.28	16.81	18.38
635.1	1.62	11.05	26.24	25.84	17.54	18.73
756.8	1.64	11.01	22.89	29.35	19.03	18.50
858.1	1.69	10.98	20.37	31.80	21.42	17.77
979.7	1.77	10.97	17.60	26.08	26.67	16.50
1000.0	1.79	10.97	17.12	25.26	27.86	16.35

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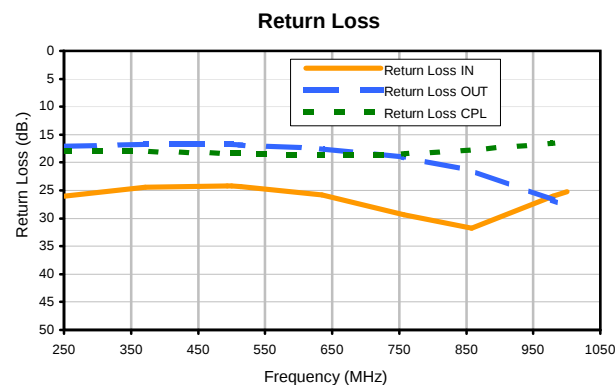
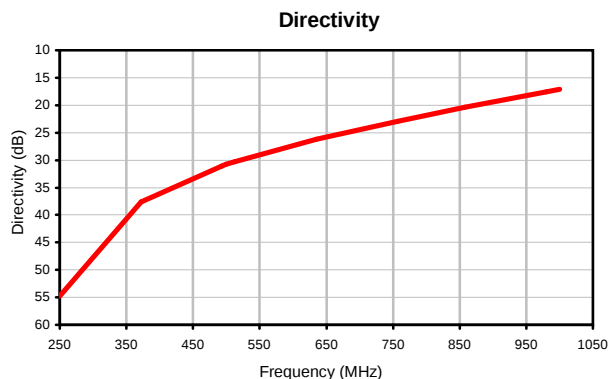
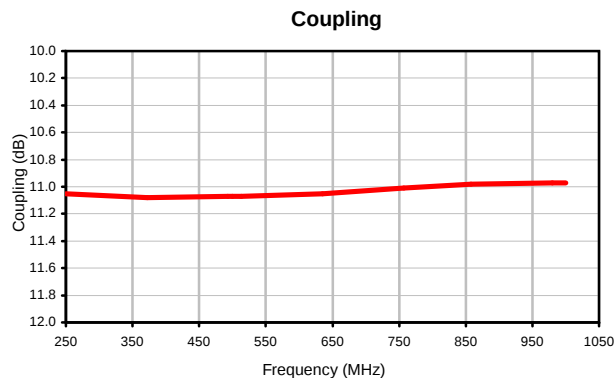
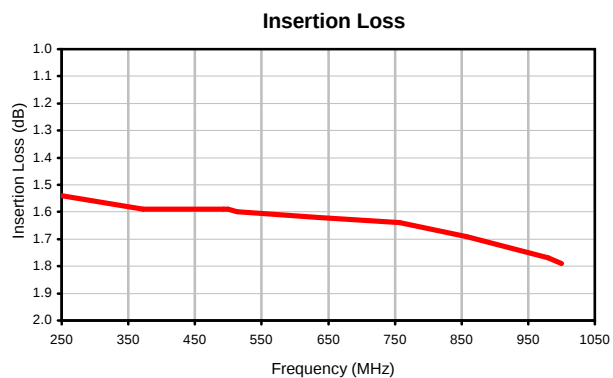
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Directional Coupler

Typical Performance Curves

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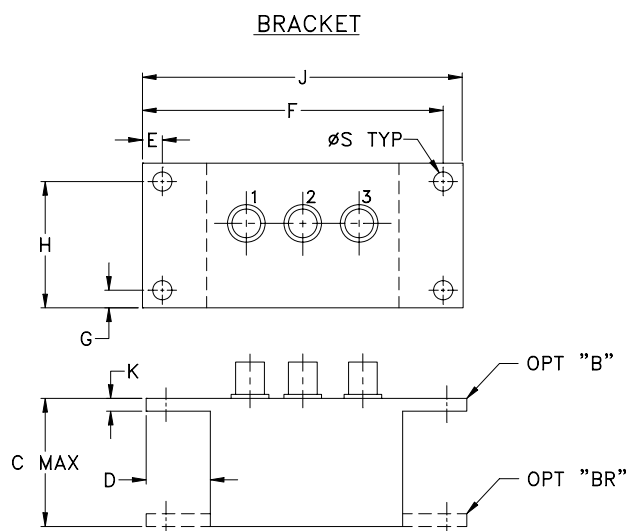
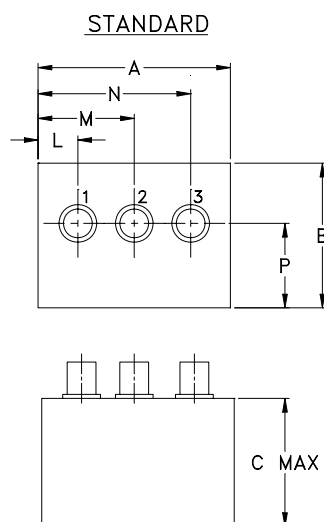


Outline Dimensions

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.



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