

Coaxial Directional Coupler

50Ω

0.1 to 250 MHz

ZMDC-30-1+
ZMDC-30-1



CASE STYLE: M21

Connectors	Model	Price	Qty.
SMA	ZMDC-30-1(+)	\$51.95	(1-9)
BRACKET (OPTION "B")		\$5.00	(1+)
BRACKET (OPTION "BR")		\$1.50	(1+)

+ RoHS compliant in accordance
with EU Directive (2002/95/EC)

The +Suffix identifies RoHS Compliance. See our web site
for RoHS Compliance methodologies and qualifications.

Maximum Ratings

Operating Temperature -55°C to 100°C

Storage Temperature -55°C to 100°C

Permanent damage may occur if any of these limits are exceeded.

Coaxial Connections

INPUT	3
OUTPUT	2
COUPLED	1

Features

- excellent mainline loss, 0.5 dB typ.
- rugged shielded case

Applications

- HF/VHF
- amateur radio
- instrumentation

Directional Coupler Electrical Specifications

FREQ. RANGE (MHz)	COUPLING (dB)		MAINLINE LOSS¹ (dB)						DIRECTIVITY (dB)						VSWR (:1)	POWER INPUT (W)	
			L		M		U		L		M		U				
	f _L -f _U	Nom.	Flatness	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.
0.1-250	30±0.5	±0.5	0.4	0.6	0.5	0.8	0.55	0.85	23	18	20	15	17	10	1.5	1.0	3.0

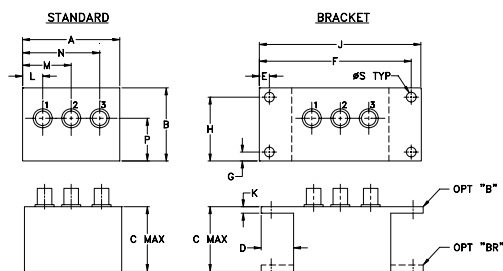
L = low range [f_L to $10 f_L$] M = mid range [$10 f_L$ to $f_U/2$] U = upper range [$f_U/2$ to f_U]

1. Mainline loss includes theoretical power loss at coupled port.

Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		Cpl
				In	Out	
0.10	0.33	30.77	40.14	14.97	14.57	22.19
0.50	0.25	30.66	40.18	28.11	24.39	22.07
0.90	0.24	30.68	40.64	31.51	26.80	22.06
24.00	0.20	30.67	37.39	37.30	29.40	21.95
52.00	0.22	30.68	35.22	31.72	28.95	21.94
89.00	0.24	30.72	33.59	27.65	27.78	21.97
132.00	0.27	30.80	30.45	24.51	26.44	22.01
169.00	0.29	30.87	29.99	22.53	24.92	22.09
214.00	0.32	30.97	28.18	20.61	23.40	22.22
250.00	0.35	31.09	28.60	19.35	22.21	22.35

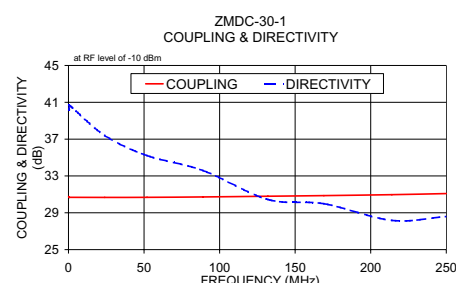
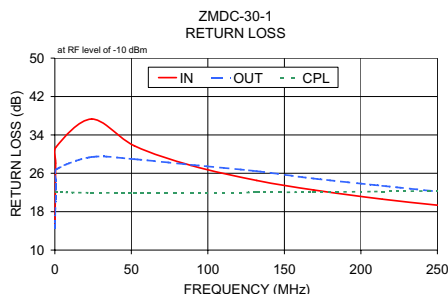
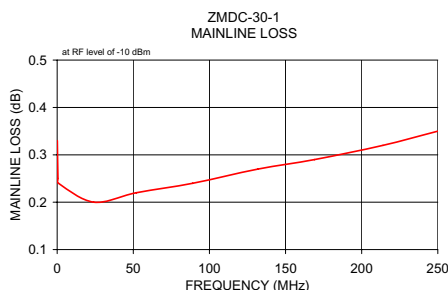
Outline Drawing



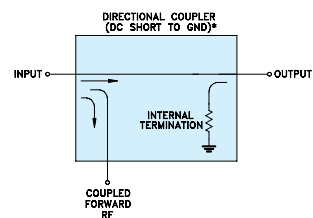
Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
1.50	1.13	1.00	.50	.155	2.345	.138	.987
38.10	28.70	25.40	12.70	3.94	59.56	3.51	25.07

J	K	L	M	N	P	S	wt
2.50	.10	.31	.75	1.19	.66	.150	grams
63.50	2.54	7.87	19.05	30.23	16.76	3.81	40.0



Electrical Schematic



* ELECTRICAL SCHEMATIC IS FOR DIRECTIONAL
COUPLER WITH INTERNAL TRANSFORMERS THAT
ROUTES DC FROM RF PORTS TO GROUND.

For detailed performance specs
& shipping online see web site

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