

Coaxial Directional Coupler

ZMDC-30-1

50Ω

0.1 to 250 MHz



CASE STYLE: M21

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C

Coaxial Connections

INPUT	3
OUTPUT	2
COUPLED	1

Features

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

Applications

- HF/VHF
- amateur radio
- instrumentation

Connectors	Model	Price	Qty.
SMA	ZMDC-30-1	\$51.95	(1-9)
BRACKET (OPTION "B")		\$5.00	(1+)
BRACKET (OPTION "BR")		\$2.50	(1+)

Directional Coupler Electrical Specifications

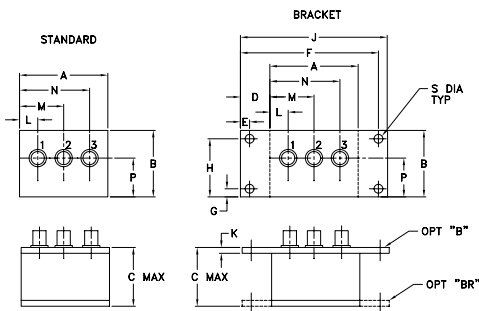
FREQ. RANGE (MHz)	COUPLING (dB)		MAINLINE LOSS ¹						DIRECTIVITY (dB)						VSWR (:1)	POWER INPUT (W)		
	Nom.	Flatness	L		M		U		L		M		U			Typ.	L	MU
			Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.				
0.1-250	30±0.5	±0.5	0.4	0.6	0.5	0.8	0.55	0.85	23	18	20	15	17	10	1.5	1.0	3.0	

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

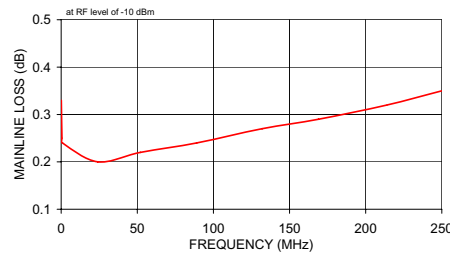


Outline Dimensions (inch/mm)

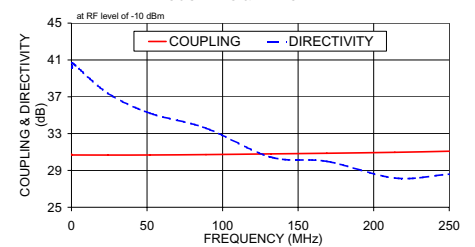
A	B	C	D	E	F	G	H
1.50	1.13	1.00	.50	.155	2.345	.138	.987
38.10	28.70	25.40	12.70	3.94	59.56	3.51	25.07

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

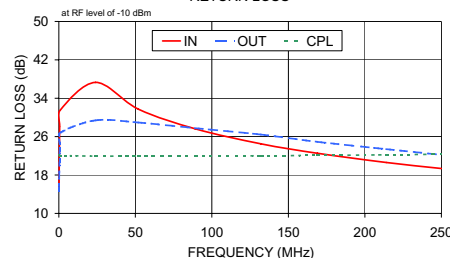
ZMDC-30-1 MAINLINE LOSS



ZMDC-30-1 COUPLING & DIRECTIVITY



ZMDC-30-1 RETURN LOSS



electrical schematic

