

Coaxial Directional Coupler

ZFDC-10-1-75

75Ω

1 to 400 MHz



Maximum Ratings

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

Coaxial Connections

INPUT	1
OUTPUT	2
COUPLED	3

Features

- excellent directivity, 44 dB typ.
- up to 4W input power
- rugged shielded case

Applications

- catv
- VHF/HF
- instrumentation

CASE STYLE: K18

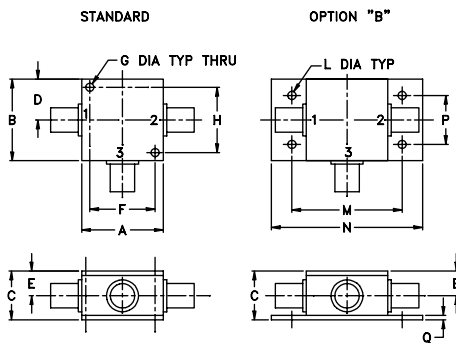
Connectors	Model	Price	Qty.
BNC	ZFDC-10-1-75	\$45.95 ea.	(1-9)
BRACKET (OPTION "B")		\$2.50	(1+)

Directional Coupler Electrical Specifications

FREQ. RANGE (MHz)	COUPLING (dB)		MAINLINE LOSS ¹						DIRECTIVITY (dB)						VSWR (:1)	POWER INPUT (W)	
			L		M		U		L		M		U				
	Typ.	Flatness	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	L	MU
f _L -f _U	Nom.	±0.5	1.0	1.7	1.1	1.5	1.1	1.6	46	30	44	28	34	20	1.3	2.0	4.0
1-400	10.5±0.5	±0.5	1.0	1.7	1.1	1.5	1.1	1.6	46	30	44	28	34	20	1.3	2.0	4.0

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.

Outline Drawing



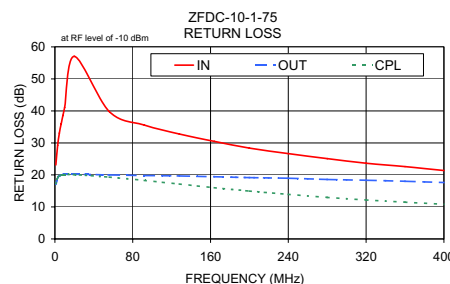
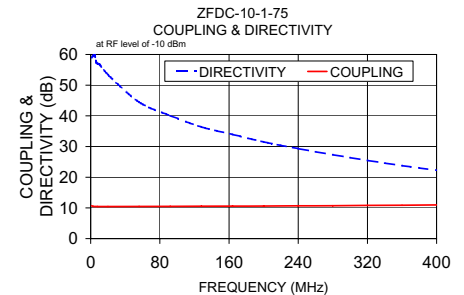
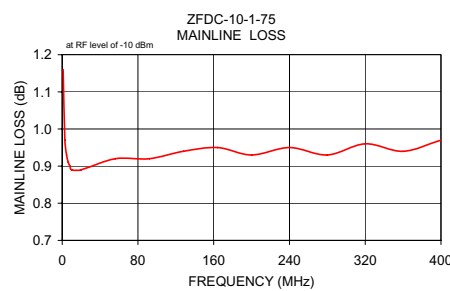
Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
1.25	1.25	.75	.63	.38	1.00	.125	1.000
31.75	31.75	19.05	16.00	9.65	25.40	3.18	25.40

J	K	L	M	N	P	Q	wt
--	--	.125	1.688	2.18	.75	.07	grams
--	--	3.18	42.88	55.37	19.05	1.78	70.0

Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		Cpl
				In	Out	
1.00	1.16	10.68	58.99	23.11	17.09	17.35
4.60	0.93	10.48	59.93	33.06	19.71	19.75
8.20	0.90	10.46	57.01	38.55	20.09	20.06
10.00	0.89	10.46	56.81	41.04	20.17	20.11
56.00	0.92	10.48	44.49	39.77	20.01	19.33
128.00	0.94	10.55	36.39	32.77	19.68	17.16
164.00	0.95	10.59	33.96	30.48	19.45	16.03
240.00	0.95	10.70	29.35	26.66	18.97	13.94
320.00	0.96	10.82	25.49	23.65	18.34	12.19
400.00	0.97	10.97	22.28	21.37	17.64	10.84



electrical schematic

