

Coaxial Directional Coupler

75Ω

10 to 250 MHz

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	1
OUTPUT	2
COUPLED	3

Features

- excellent directivity, 35 dB typ.
- excellent mainline loss, 0.3 dB typ.
- rugged shielded case

Applications

- catv
- VHF/UHF
- instrumentation
- amateur radio

ZFDC-20-3-75+



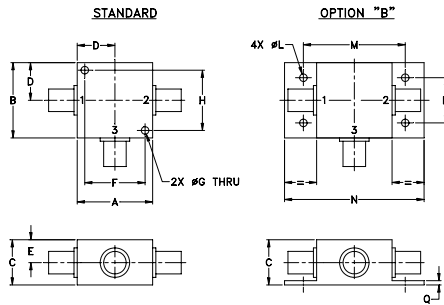
CASE STYLE: K18

Connectors	Model	Price	Qty.
BNC	ZFDC-20-3-75+	\$49.95 ea.	(1-9)
BRACKET (OPTION "B")		\$5.00	(1+)

+RoHS Compliant

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

Outline Drawing



Outline Dimensions (inch)

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

Directional Coupler Electrical Specifications

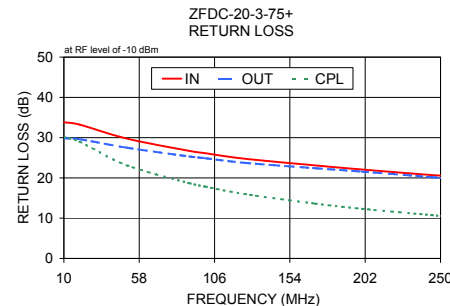
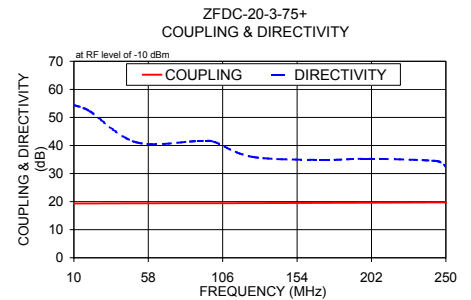
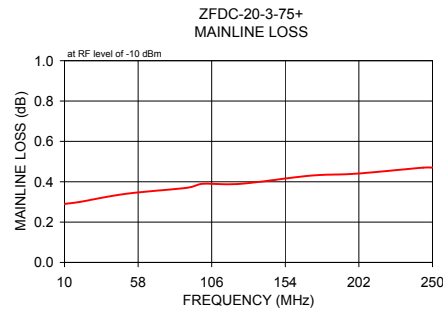
FREQ. RANGE (MHz)	COUPLING (dB)		MAINLINE LOSS ¹ (dB)						DIRECTIVITY (dB)						VSWR (:1)	POWER INPUT (W)	
			L		M		U		L		M		U				
	f _L -f _U	Nom.	Flatness	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.
10-250	19.3±0.5	±0.3	0.25	0.4	0.3	0.5	0.4	0.6	29	25	29	25	28	24	1.2	1.0	2.0

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]

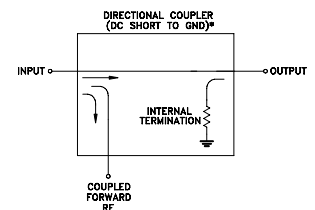
1. Mainline loss includes theoretical power loss at coupled port.

Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss		
				In	(dB) Out	Cpl
10.00	0.29	19.36	54.40	33.81	29.81	30.17
20.00	0.30	19.36	52.31	33.26	29.61	28.99
50.00	0.34	19.41	41.16	29.77	27.51	23.16
90.00	0.37	19.44	41.57	26.71	25.32	18.69
100.00	0.39	19.46	41.41	26.15	24.89	17.85
125.00	0.39	19.49	35.96	24.78	23.76	16.01
170.00	0.43	19.56	34.87	23.12	22.40	13.64
200.00	0.44	19.62	35.28	22.09	21.57	12.33
244.00	0.47	19.73	34.47	20.73	20.21	10.76
250.00	0.47	19.72	32.56	20.58	20.04	10.55



Electrical Schematic



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

For detailed performance specs & shopping online see web site

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