

# Coaxial Directional Coupler

## ZFDC-10-21-75

75Ω

10 to 750 MHz



CASE STYLE: K18

Connectors	Model	Price	Qty.
BNC	ZFDC-10-21-75	\$54.95	(1-9)
BRACKET (OPTION "B")		\$2.50	(1+)

### 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

- wideband, 10 to 750 MHz
- excellent directivity, 30 dB typ.
- rugged shielded case

### Applications

- catv
- VHF/UHF
- instrumentation
- communications receivers & transmitters

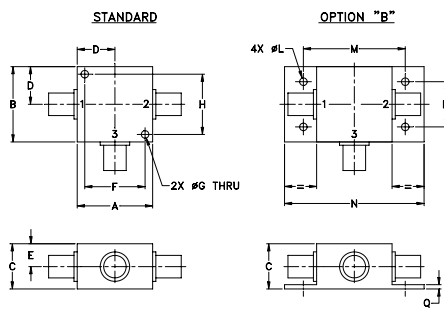
### Directional Coupler Electrical Specifications

FREQ. RANGE (MHz)	COUPLING (dB)		MAINLINE LOSS <sup>1</sup> (dB)						DIRECTIVITY (dB)						VSWR (:1)	POWER INPUT (W)	
	Nom.	Flatness	L		M		U		L		M		U			Typ.	L
$f_L$ - $f_U$			Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Max.
10-750	11±0.5	±0.75	1.5	1.8	1.5	1.9	1.7	2.1	36	30	30	20	26	20	1.4	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.

### Outline Drawing

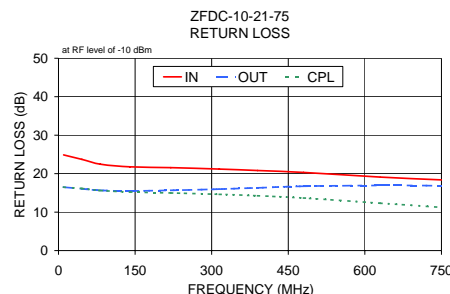
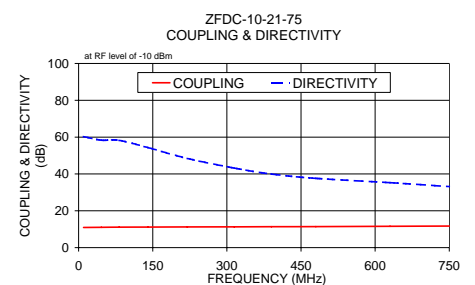
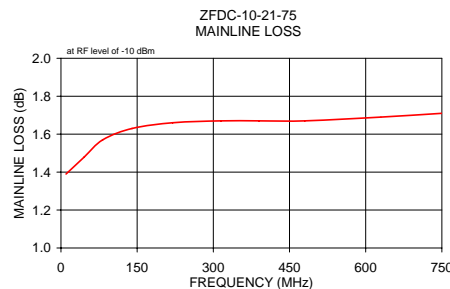


### Outline Dimensions (inch/mm)

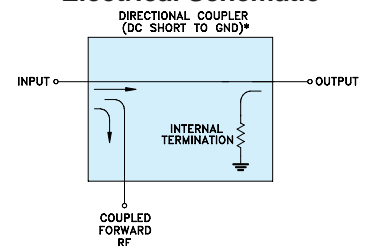
A	B	C	D	E	F	G	H
1.25	1.25	.75	.63	.38	1.00	.125	1.000
31.75	31.75	19.05	16.00	9.65	25.40	3.18	25.40
J	K	L	M	N	P	Q	wt
--	--	.125	1.688	2.18	.75	.07	grams
--	--	3.18	42.88	55.37	19.05	1.78	70.0

### Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		Cpl
				In	Out	
10.00	1.39	10.96	60.33	24.87	16.51	16.50
46.00	1.48	11.02	58.37	23.71	16.08	16.15
82.00	1.57	11.10	58.27	22.47	15.67	15.63
140.00	1.63	11.17	54.38	21.77	15.51	15.24
220.00	1.66	11.23	48.45	21.57	15.68	14.99
315.00	1.67	11.30	43.20	21.19	15.98	14.64
390.00	1.67	11.36	39.99	20.82	16.33	14.25
480.00	1.67	11.43	37.62	20.32	16.73	13.67
630.00	1.69	11.59	35.29	19.10	16.94	12.33
750.00	1.71	11.72	33.16	18.39	16.89	11.26



### Electrical Schematic



\* ELECTRICAL SCHEMATIC IS FOR DIRECTIONAL COUPLER WITH INTERNAL TRANSFORMER(S) THAT ROUTES DC FROM RF PORTS TO GROUND.

For detailed performance specs & shopping online see web site

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