

# Coaxial Directional Coupler

## ZADC-10-4-75

75Ω

10 to 1000 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	S

### Features

- wideband, 10 to 1000 MHz
- excellent VSWR, 1.17 typ.
- rugged shielded case

### Applications

- cable tv
- instrumentation
- cellular

CASE STYLE: F14

Connectors	Model	Price	Qty.
BNC	ZADC-10-4-75	\$54.95 ea.	(1-9)

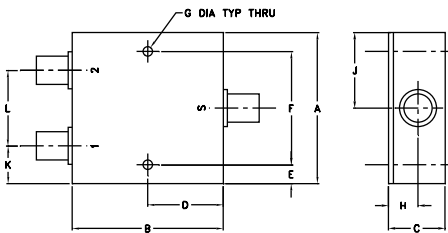
### Directional Coupler Electrical Specifications

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 <sub>L</sub> -f <sub>U</sub>			Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Max.
10-1000	10.7±0.5	±0.5	1.18	1.9	1.28	1.9	1.32	1.9	27	20	22	15	18	13	1.17	1.0	1.0

L = 10-100 MHz M = 100-500 MHz U = 500-1000 MHz

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

### Outline Drawing

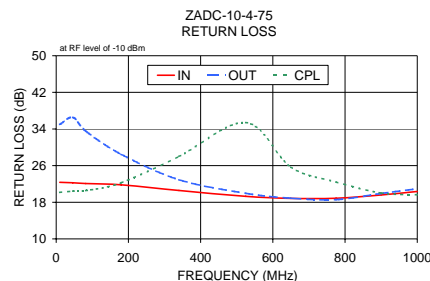
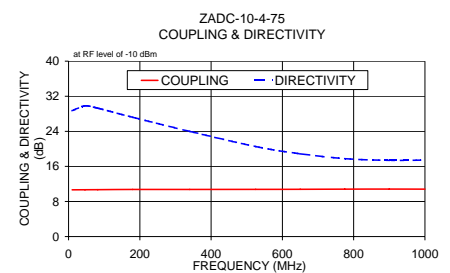
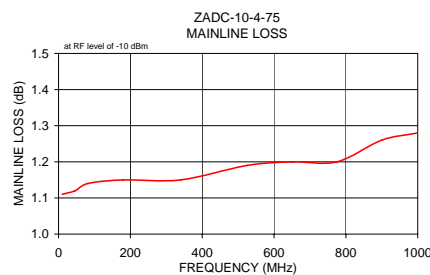


### Outline Dimensions (inch/mm)

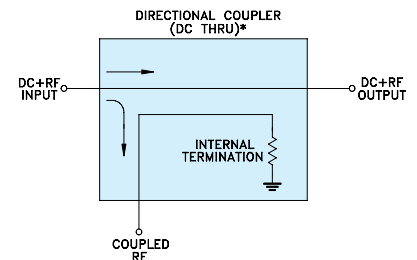
A	B	C	D	E	F	G	H	J	K	L	wt
2.00	2.00	0.75	1.00	0.25	1.500	0.125	0.39	1.00	0.50	1.00	grams
50.80	50.80	19.05	25.40	6.35	38.10	3.18	9.91	25.40	12.70	25.40	170.0

### Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		
				In	Out	Cpl
10.00	1.11	10.66	28.71	22.36	35.00	20.15
46.00	1.12	10.68	29.82	22.25	36.55	20.44
82.00	1.14	10.69	29.29	22.09	33.54	20.56
180.00	1.15	10.74	27.22	21.81	28.49	22.26
340.00	1.15	10.74	23.99	20.57	22.92	28.01
525.00	1.19	10.77	20.53	19.29	19.96	35.42
650.00	1.20	10.78	18.88	18.85	18.89	25.69
775.00	1.20	10.81	17.77	18.87	18.57	22.43
900.00	1.26	10.83	17.39	19.59	19.93	20.02
1000.00	1.28	10.81	17.46	20.36	20.95	19.65



### Electrical Schematic



\* ELECTRICAL SCHEMATIC FOR DIRECTIONAL COUPLER THAT IS DESIGNED WITHOUT INTERNAL TRANSFORMERS.

For detailed performance specs & shopping online see web site

**Mini-Circuits**  
ISO 9001 ISO 14001 AS 9100 CERTIFIED

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

IF/RF MICROWAVE COMPONENTS

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