

Coaxial Directional Coupler

50Ω

1 to 500 MHz

ZFDC-10-1+
ZFDC-10-1



BNC version shown
CASE STYLE: K18

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, 33 dB typ.
- excellent insertion loss, 0.8 dB typ.
- rugged shielded case

Applications

- VHF/UHF
- instrumentation
- communication receivers & transmitters

Connectors	Model	Price	Qty.
BNC	ZFDC-10-1(+)	\$44.95	(1-9)
SMA	ZFDC-10-1-S(+)	\$49.95	(1-9)
N-TYPE	ZFDC-10-1-N(+)	\$49.95	(1-9)
BRACKET (OPTION "B")		\$2.50	(1+)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

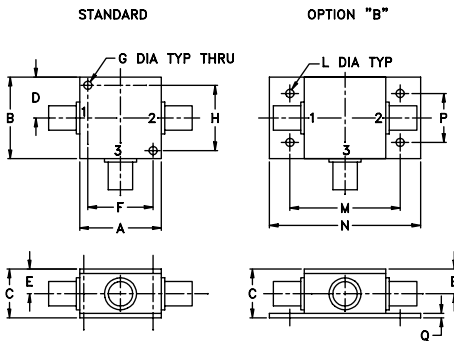
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

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
1-500	10.5±0.25	±0.6	1.0	1.3	0.8	1.1	1.0	1.3	32	25	33	25	22	15	1.2	1.5	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.

Outline Drawing



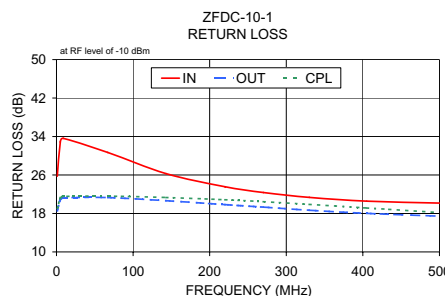
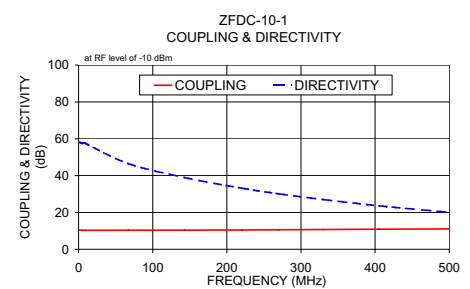
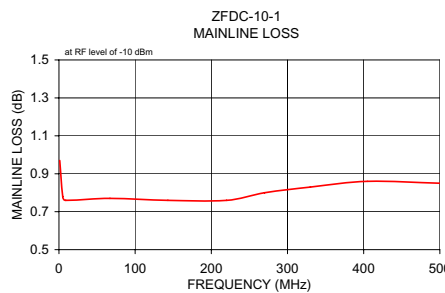
Outline Dimensions (inch/mm)

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	In	Out	
1.00	0.97	10.47	58.25	25.76	18.55	19.10	
5.00	0.78	10.32	57.52	32.88	20.94	21.28	
9.00	0.76	10.31	57.51	33.62	21.25	21.54	
67.00	0.77	10.34	46.55	30.69	21.30	21.61	
143.00	0.76	10.40	38.96	26.28	20.66	21.32	
220.00	0.76	10.49	33.22	23.55	19.85	20.86	
270.00	0.80	10.62	30.12	22.35	19.32	20.45	
330.00	0.83	10.74	27.02	21.34	18.68	19.89	
405.00	0.86	10.90	23.63	20.56	18.03	19.15	
500.00	0.85	11.04	20.05	20.16	17.44	18.20	



electrical schematic

