Coaxial

Directional Coupler

50Ω 1 to 2000 MHz

ZFDC-10-5+
ZFDC-10-5

BNC version shown

CASE STYLE: K18

Connectors	Model	Price	Qty.
BNC	ZFDC-10-5(+)	$84.95	(1-9)
SMA	ZFDC-10-5-S+	$89.95	(1-9)
N-TYPE	ZFDC-10-5-N(+)	$89.95	(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.

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

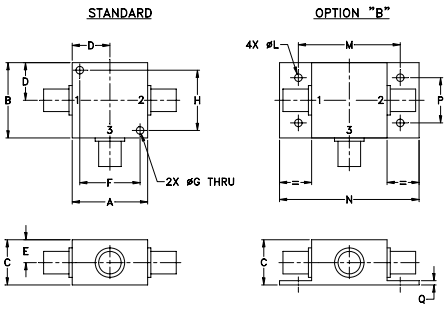
Features

- very wideband, 1 to 2000 MHz
- excellent directivity, 30 dB typ.
- rugged shielded case

Applications

- cellular
- instrumentation
- communication receivers & transmitters
- GPS

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

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			L	MU
f_L-f_U	Nom.	Flatness	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Max.
1-2000	10.8±0.5	±0.5	1.2	1.9	1.2	1.8	1.8	2.5	38	25	30	18	22	18	1.3	0.5	0.5

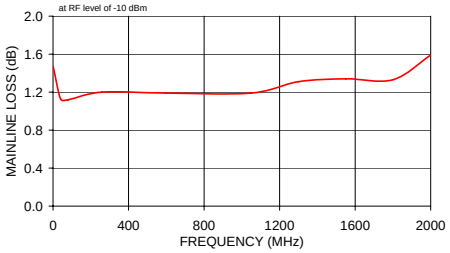
L = low range [f_L to 10 f_L] M = mid range [10 f_L to f_U/2] U= upper range [f_U/2 to f_U]

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

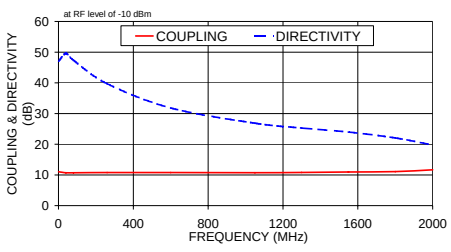
Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB) In	Return Loss (dB) Out	Return Loss (dB) Cpl
1.00	1.47	11.03	47.08	14.55	18.01	18.03
40.00	1.13	10.71	49.57	18.26	30.69	31.26
80.00	1.12	10.70	47.38	18.32	30.20	30.46
260.00	1.20	10.78	39.74	18.61	27.02	25.80
600.00	1.19	10.77	31.82	18.79	22.14	19.98
1050.00	1.19	10.73	26.87	18.84	19.38	15.98
1300.00	1.31	10.81	25.29	18.83	18.76	14.75
1550.00	1.34	10.96	23.98	18.70	17.75	13.90
1800.00	1.33	11.08	22.06	17.99	15.32	13.15
2000.00	1.59	11.68	19.78	16.91	12.53	12.52

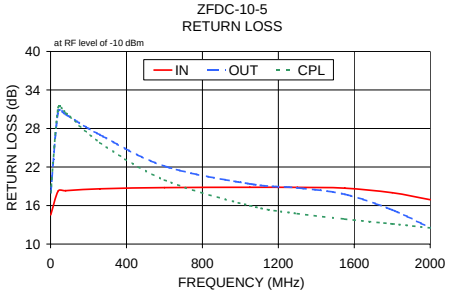
ZFDC-10-5
MAINLINE LOSS



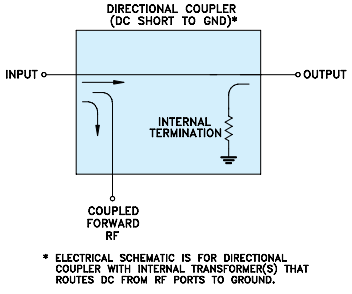
ZFDC-10-5
COUPLING & DIRECTIVITY



ZFDC-10-5
RETURN LOSS



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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M121747
ZFDC-10-5
WZ/TD/CP/AM
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