

Coaxial

Bi-Directional Coupler

50Ω

High Power

860 to 970 MHz

ZFBDC20-970HP



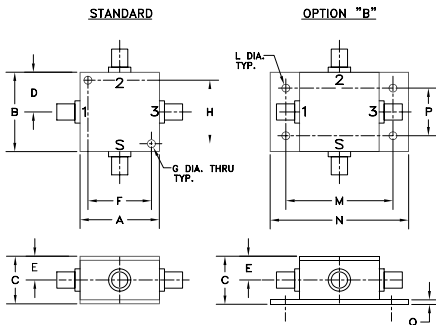
Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C

Coaxial Connections

INPUT	2
OUTPUT	3
COUPLED (forward)	1
COUPLED (reverse)	S

Outline Drawing



Outline Dimensions (inch)

A	B	C	D	E	F	G	H	
1.25	1.25	.75	.63	.38	1.000	.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	75.0	

For option B with N-Type connectors, dimension "C" increases to 0.94 inches.

Features

- very low insertion loss, 0.1 dB typ.
- excellent directivity, 28 dB typ.
- excellent VSWR, 1.1: typ.
- high power operation, 10W

Applications

- VSWR measurement
- power monitoring of cellular transmitters
- power levelling

CASE STYLE: J17

Connectors	Model	Price	Qty.
SMA	ZFBDC20-970HP	\$79.95	(1-9)
BRACKET (OPTION "B")		\$2.50	(1+)

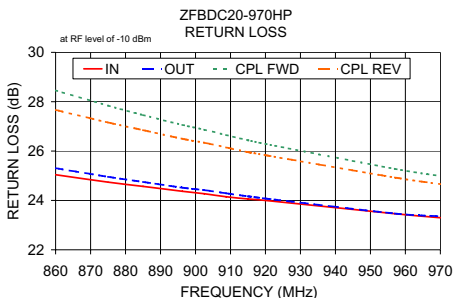
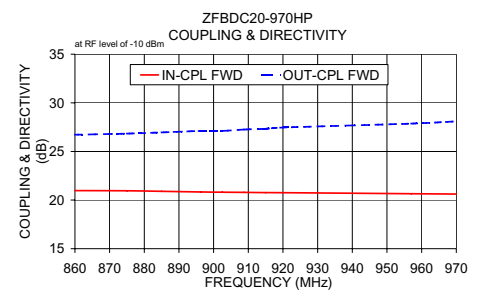
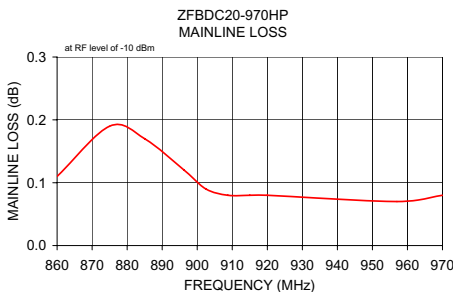
Bi-Directional Coupler Electrical Specifications

FREQ. (MHz)	COUPLING (dB)		MAINLINE LOSS ¹ (dB)		DIRECTIVITY (dB)		VSWR (:1)	POWER INPUT (W)	
f_L - f_U	Nom.	Flatness	Typ.	Max.	Typ.	Min.	Typ.	L Max.	MU Max.
860-970	20.4±0.6	±0.6	0.1	0.4	28	20	1.1	10	10

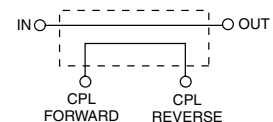
1. Mainline loss includes theoretical power loss at coupled port.

Typical Performance Data

Frequency (MHz)	Mainline Loss (dB)		Coupling (dB)		Directivity (dB)		Return Loss (dB)			
	In-Out	In-Cpl Fwd	Out-Cpl Rev	Out-Cpl Fwd	In-Cpl Rev	In	Out	Cpl Fwd	Cpl Rev	
860.00	0.11	20.97	21.06	26.72	22.08	25.04	25.31	28.46	27.67	
875.00	0.19	20.96	21.06	26.84	21.99	24.74	24.96	27.84	27.16	
885.00	0.17	20.90	21.01	26.96	21.92	24.57	24.75	27.46	26.85	
896.25	0.12	20.83	20.95	27.11	21.92	24.37	24.52	27.06	26.50	
902.50	0.09	20.81	20.93	27.12	21.84	24.27	24.42	26.87	26.34	
908.75	0.08	20.79	20.90	27.26	21.83	24.15	24.29	26.65	26.15	
915.00	0.08	20.77	20.89	27.33	21.78	24.06	24.17	26.44	25.96	
920.00	0.08	20.76	20.87	27.46	21.77	24.00	24.08	26.29	25.84	
957.00	0.07	20.65	20.76	27.87	21.87	23.46	23.47	25.28	24.93	
970.00	0.08	20.62	20.73	28.10	21.55	23.30	23.36	24.99	24.66	



electrical schematic



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