

# Directional Coupler

50Ω

10 to 1000 MHz

## ZFDC-20-4L



CASE STYLE: K18

Connectors	Model	Price	Qty.
SMA	ZFDC-20-4L	\$64.95	(1-9)
BRACKET (OPTION "B")		\$5.00	(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 1000 MHz
- excellent directivity, 30 dB typ.
- excellent mainline loss, 0.3 dB typ.
- excellent VSWR, 1.1:1 typ.
- rugged shielded case

### Applications

- VSWR measurement
- power monitoring
- power leveling

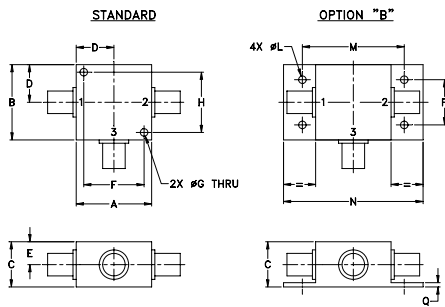
### Directional Coupler Electrical Specifications

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	MU
			Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.				
10-1000	20.2±0.5	±0.5	0.2	0.5	0.3	0.7	0.7	1.2	40	20	30	16	20	14	1.1	1.0	1.0	

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

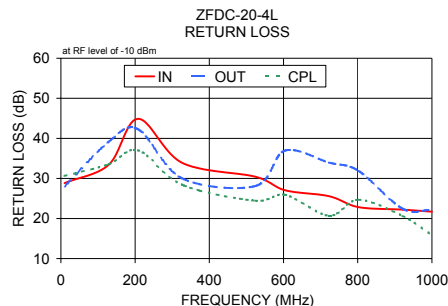
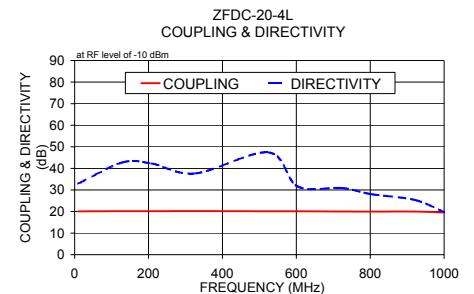
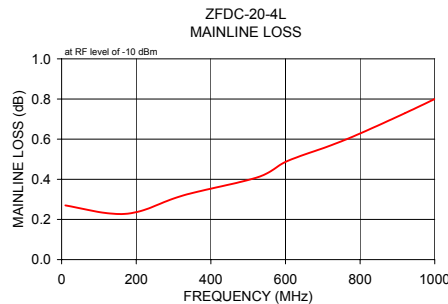


### Outline Dimensions (inch/mm)

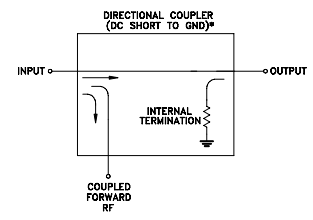
A	B	C	D	E	F	G	H
1.25	1.25	.75	.63	.38	1.00	.125	1.000
31.75	31.75	19.05	16.00	9.65	25.40	3.18	25.40
J	K	L	M	N	P	Q	wt
--	--	.125	1.688	2.18	.75	.07	grams
--	--	3.18	42.88	55.37	19.05	1.78	70.0

### Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)		Return Loss (dB)		Cpl
			In	Out	In	Out	
10.00	0.27	20.09	32.95	28.83	28.03	30.63	
128.80	0.23	20.16	42.77	33.41	39.14	33.55	
208.00	0.24	20.16	42.27	44.88	42.27	37.03	
326.80	0.32	20.21	37.67	33.89	30.03	28.43	
524.80	0.41	20.12	47.40	30.41	28.13	24.44	
604.00	0.49	20.13	31.59	27.05	36.95	25.93	
722.80	0.57	20.01	30.93	25.57	33.97	20.69	
802.00	0.63	19.96	28.10	22.83	31.91	24.67	
920.80	0.73	19.96	25.36	22.22	22.46	20.64	
1000.00	0.80	19.57	19.77	21.71	22.17	15.92	



### Electrical Schematic



\* ELECTRICAL SCHEMATIC IS FOR DIRECTIONAL COUPLER WITH INTERNAL TRANSFORMERS THAT ROUTES DC FROM RF PORTS TO GROUND.

For detailed performance specs & shopping online see web site



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