

Coaxial Directional Coupler

75Ω 5 to 1000 MHz

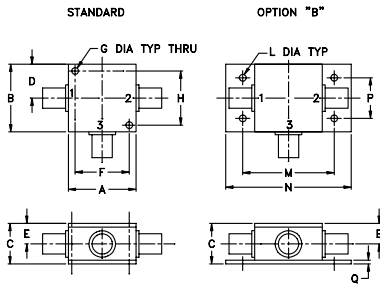
Maximum Ratings

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

Coaxial Connections

INPUT	1
OUTPUT	2
COUPLED	3

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

Features

- very flat coupling
- very broad, multi-octave
- all welded construction
- protected by U.S. Patents 6,140,887 & 6,784,521

Applications

- VHF/UHF
- cellular
- communications receivers & transmitters
- cable tv



CASE STYLE: K18

Connectors	Model	Price	Qty.
BNC	Z30-10-4-75(+)	\$29.95 ea.	(1-24)

+ 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.

Electrical Specifications (T_{AMB} = -55°C to 100°C)

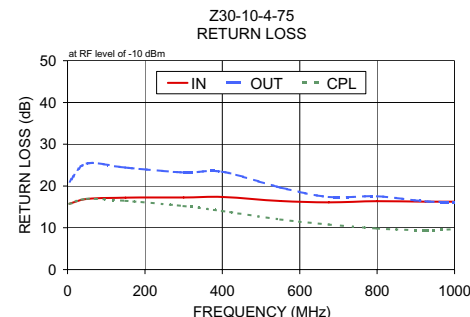
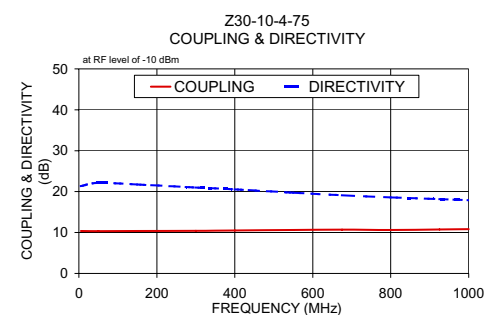
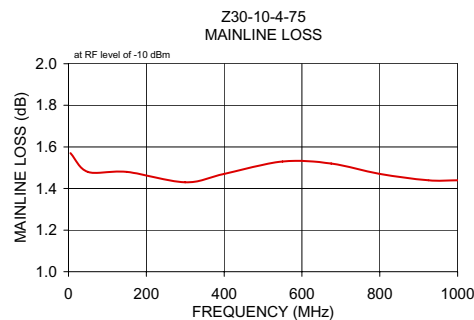
FREQ. (MHz)	COUPLING (dB)		MAINLINE LOSS ¹ (dB)						DIRECTIVITY (dB)						VSWR (:1)	POWER INPUT, W	
			L		M		U		L		M		U			L	MU
	f _L -f _U	Nom.	Typ.	Flatness	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.		Typ.	Min.
5-1000	10.5±0.5	±0.3	1.8	2.5	1.5	2.3	1.5	2.2	22	16	21	14	19	—	1.30	0.5	1.0

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.

Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		
				In	Out	Cpl
5.00	1.57	10.37	21.34	15.75	21.08	15.73
50.00	1.48	10.32	22.14	16.91	25.37	16.93
150.00	1.48	10.37	21.74	17.20	24.41	16.47
300.00	1.43	10.43	21.02	17.24	23.24	15.21
400.00	1.47	10.51	20.55	17.36	23.43	14.01
550.00	1.53	10.64	19.74	16.41	19.62	11.98
675.00	1.52	10.70	19.10	16.07	17.37	10.77
800.00	1.47	10.64	18.60	16.36	17.53	9.81
925.00	1.44	10.74	18.18	16.26	16.35	9.42
1000.00	1.44	10.83	17.88	16.24	16.18	9.66



electrical schematic

