

Coaxial Directional Coupler

75Ω 5 to 1000 MHz

Z30-10-4-75+



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 has been added in order to identify 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

Coaxial Connections

INPUT	1
OUTPUT	2
COUPLED	3

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

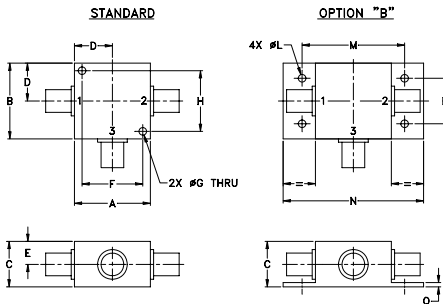
Electrical Specifications (T_{AMB} = -55°C to 100°C)

FREQ. (MHz)	COUPLING (dB)		MAINLINE LOSS ¹ (dB)						DIRECTIVITY (dB)						VSWR (:1)	POWER INPUT, W		
	Nom.	Typ. Flatness	L		M		U		L		M		U			Typ.	L	MU
f _L -f _U			Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Max.	
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.

Outline Drawing



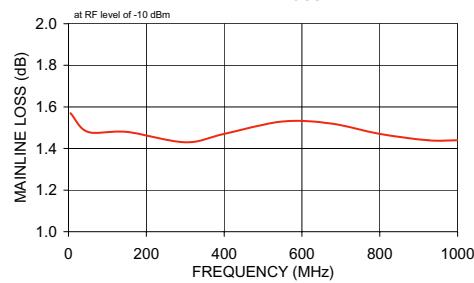
Outline Dimensions (inch/mm)

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

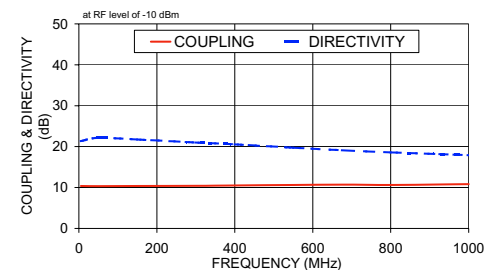
Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		
				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

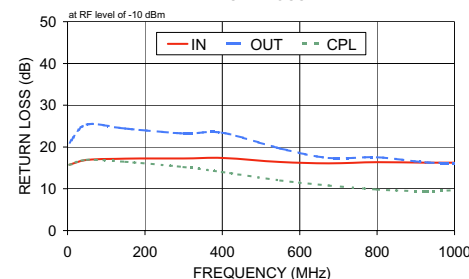
Z30-10-4-75+ MAINLINE LOSS



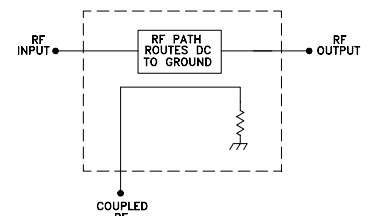
Z30-10-4-75+ COUPLING & DIRECTIVITY



Z30-10-4-75+ RETURN LOSS



electrical schematic



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