

Coaxial Directional Coupler

Z30-18-4-75

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

Features

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

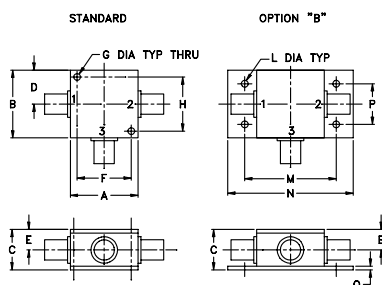
Applications

- VHF/UHF
- instrumentation
- cable tv
- cellular

CASE STYLE: K18

Connectors	Model	Price	Qty.
BNC	Z30-18-4-75	\$29.95 ea.	(1-24)

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

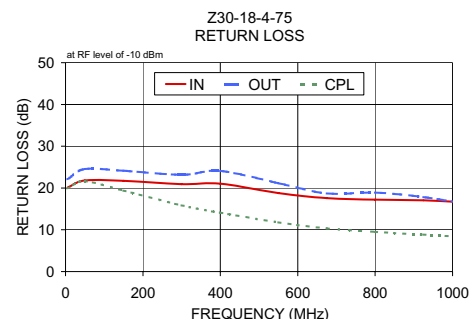
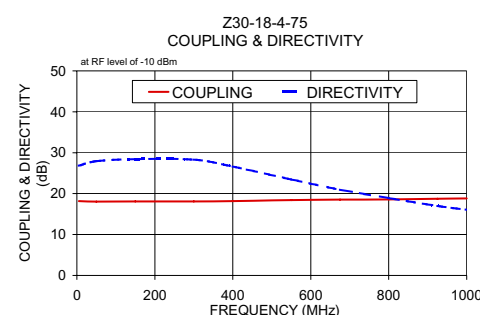
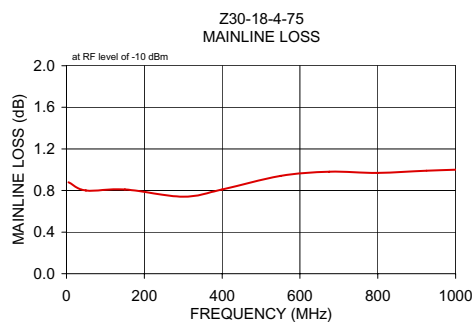
Electrical Specifications (T_{AMB} = -55°C to 100°C)

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
f _L -f _U			Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Max.
5-1000	18.5±0.5	±0.5	0.8	1.5	0.85	1.5	0.95	1.6	28	17	23	16	15	—	1.30	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.

Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		
				In	Out	Cpl
5.00	0.88	18.17	26.83	20.12	22.09	19.91
50.00	0.80	18.05	27.94	21.82	24.52	21.60
150.00	0.81	18.07	28.42	21.72	24.14	19.39
300.00	0.74	18.07	28.32	20.92	23.17	15.85
400.00	0.81	18.19	26.64	21.03	24.11	14.06
550.00	0.94	18.42	23.47	18.77	21.14	11.77
675.00	0.98	18.54	20.98	17.59	18.69	10.33
800.00	0.97	18.59	18.90	17.21	18.90	9.51
925.00	0.99	18.73	16.98	17.06	17.80	8.84
1000.00	1.00	18.84	16.02	16.74	16.72	8.45



electrical schematic

