

# Directional Coupler

**NEW!**  
Z30-13-5-75

75Ω

5 to 1500 MHz



CASE STYLE: K18  
CONNECTORS: BNC  
PRICE: \$29.95 ea. QTY (1-24)

### Maximum Ratings

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

### Coaxial Connections

PORT	db
INPUT	1
OUTPUT	2
COUPLED	3

### Features

- very flat coupling
- very broad, multi-octave
- all welded construction
- protected by U.S. Patent 6140887 & 6784531

### Applications

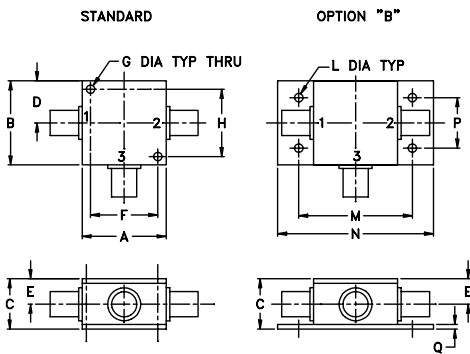
- VHF/UHF
- instrumentation
- communications receivers & transmitters
- cable tv

### Electrical Specifications (T<sub>AMB</sub> = -55°C to 100°C)

FREQ. RANGE (MHz)	COUPLING (dB)		MAINLINE LOSS <sup>1</sup> (dB)			DIRECTIVITY (dB)			VSWR (:1)	POWER INPUT, W							
	Nom.	Typ. Flatness	L Typ.	M Typ.	U Typ.	L Typ.	M Typ.	U Typ.		L Max.	MU Max.						
5-1000	13.4±0.5	±0.4	0.85	1.4	0.9	1.6	1.0	1.7	22	17	20	14	19	—	1.30	0.5	1.0
1000-1500	14.0±0.5	±0.5	—	—	—	—	—	—	18	—	—	—	—	—	1.40	0.5	1.0

L = low range [f<sub>L</sub> to 10 f<sub>L</sub>] M = mid range [10 f<sub>L</sub> to f<sub>U</sub>/2] U = upper range [f<sub>U</sub>/2 to f<sub>U</sub>]  
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	1.00
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	2.18	.07	grams
--	--	3.18	42.88	55.37	55.37	1.78	70.0

### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		
				In	Out	Cpl
5.00	0.87	13.08	21.59	20.33	25.77	22.04
100.00	0.83	13.09	21.83	21.40	28.11	21.82
200.00	0.81	13.12	21.28	20.81	25.17	18.35
400.00	0.86	13.28	20.04	19.81	22.67	13.27
500.00	0.96	13.45	19.52	18.43	20.05	11.87
700.00	1.05	13.58	18.80	16.28	17.07	9.73
800.00	1.06	13.54	18.70	15.99	16.93	8.80
900.00	1.07	13.56	18.67	16.28	16.35	8.73
1000.00	1.08	13.57	18.68	16.13	15.35	8.61
1500.00	1.43	13.97	15.97	16.05	14.33	7.28

