Coaxial

Directional Coupler

ZDC-10-1-75+
ZDC-10-1-75

75Ω 1 to 250 MHz

CASE STYLE: M22

Connectors	Model	Price	Qty.
BNC	ZDC-10-1-75(+)	$44.95 ea.	(1-9)
BRACKET (OPTION"B")		$5.00	(1+)
BRACKET (OPTION"BR")		$1.50	(1+)

+ 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.

Maximum Ratings

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

Coaxial Connections

INPUT	3
OUTPUT	2
COUPLED	1

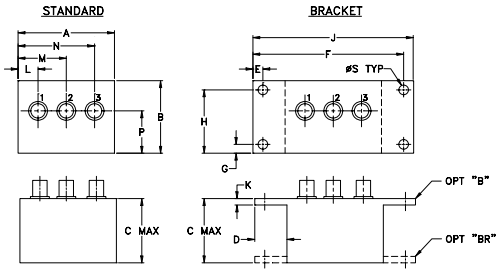
Features

- excellent directivity, 30 dB typ.
- rugged shielded case

Applications

- VHF/HF
- instrumentation
- communication receivers & transmitters
- amateur radio

Outline Drawing



Outline Dimensions (inch / mm)

A	B	C	D	E	F	G	H
2.25	1.38	1.24	.50	.150	3.100	.138	1.238
57.15	35.05	31.50	12.70	3.81	78.74	3.51	31.45

J	K	L	M	N	P	S	wt
3.25	.10	.40	1.15	1.86	.64	.150	grams
82.55	2.54	10.16	29.21	47.24	16.26	3.81	74.0

Directional Coupler Electrical Specifications

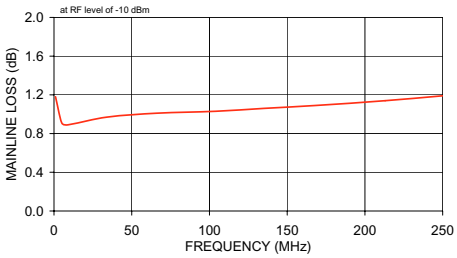
FREQ. RANGE (MHz)	COUPLING (dB)		MAINLINE LOSS[1] (dB)						DIRECTIVITY (dB)						VSWR (:1)	POWER INPUT (W)	
			L		M		U		L		M		U			L	MU
f_L-f_U	Nom.	Flatness	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Max.
1-250	10.5±0.5	±0.75	1.1	1.5	1.1	1.5	1.1	1.5	30	20	30	20	30	20	2.0	2.0	4.0

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.

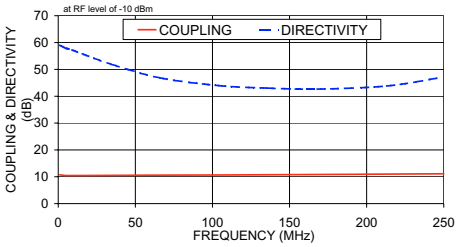
Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB) In	Return Loss (dB) Out	Return Loss (dB) Cpl
1.00	1.18	10.73	59.03	21.38	16.52	16.51
5.00	0.91	10.47	57.90	35.71	19.69	19.82
9.00	0.89	10.46	57.24	59.04	19.88	19.96
34.00	0.97	10.53	52.00	29.42	19.04	18.32
66.00	1.01	10.60	46.85	24.14	18.06	16.17
104.00	1.03	10.68	43.98	20.51	16.82	13.89
135.00	1.06	10.76	43.05	18.43	15.79	12.32
168.00	1.09	10.86	42.67	16.71	14.77	10.97
213.00	1.14	11.00	43.85	14.92	13.50	9.56
250.00	1.19	11.13	47.13	13.77	12.57	8.67

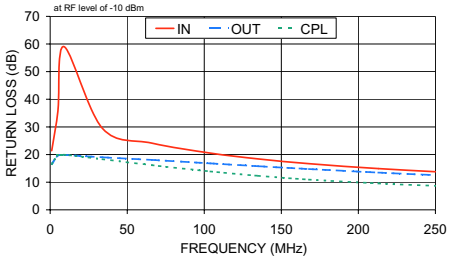
ZDC-10-1-75
MAINLINE LOSS



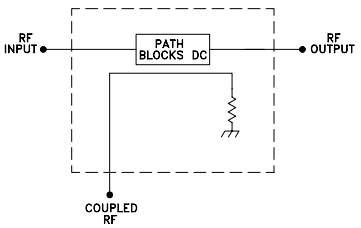
ZDC-10-1-75
COUPLING & DIRECTIVITY



ZDC-10-1-75
RETURN LOSS



electrical schematic



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