*Coaxial*

# Directional Coupler

75Ω 50 to 100 MHz

# ZDC-2375+
# ZDC-2375

CASE STYLE: M22

| Connectors | Model | Price | Qty. |
|---|---|---|---|
| **BNC** | ZDC-2375(+) | $52.95 ea. | (1-9) |
| **BRACKET (OPTION"B")** | | $5.00 | (1+) |
| **BRACKET (OPTION"BR")** | | $1.50 | (1+) |

***+RoHS Compliant***

*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 |

Permanent damage may occur if any of these limits are exceeded.

## Coaxial Connections

| | |
|---|---|
| INPUT | 3 |
| OUTPUT | 2 |
| COUPLED | 1 |

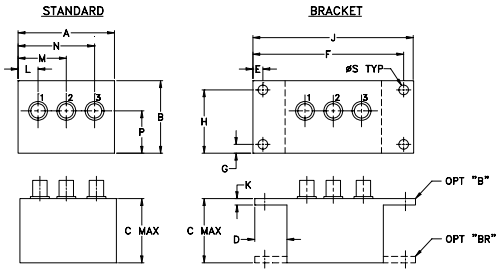
## Features

- excellent directivity, 35 dB typ.
- rugged shielded case

## Applications

- VHF
- instrumentation
- 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

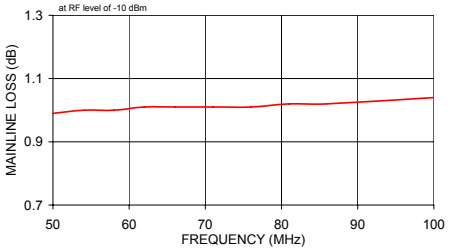
| FREQ. RANGE (MHz) | COUPLING (dB) | | MAINLINE LOSS[1] (dB) | | DIRECTIVITY (dB) | | VSWR (:1) | POWER INPUT (W) |
|---|---|---|---|---|---|---|---|---|
| $f_L$-$f_U$ | Nom. | Flatness | Typ. | Max. | Typ. | Min. | Typ. | Max. |
| 50-100 | 10.5±0.3 | ±0.2 | 1.1 | 1.3 | 35 | 30 | 1.3 | 4.0 |

1. Mainline loss includes theoretical power loss at coupled port.

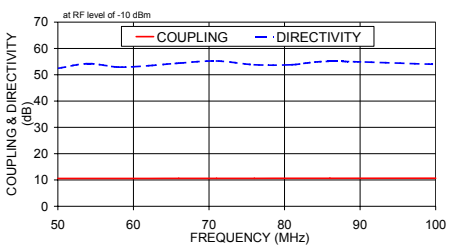
## Typical Performance Data

| 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 |
|---|---|---|---|---|---|---|
| 50.00 | 0.99 | 10.57 | 52.45 | 26.22 | 18.63 | 17.21 |
| 54.00 | 1.00 | 10.58 | 54.23 | 25.62 | 18.48 | 16.93 |
| 58.00 | 1.00 | 10.58 | 52.93 | 25.06 | 18.35 | 16.67 |
| 62.00 | 1.01 | 10.59 | 53.45 | 24.52 | 18.21 | 16.40 |
| 66.00 | 1.01 | 10.60 | 54.40 | 24.05 | 18.07 | 16.14 |
| 71.00 | 1.01 | 10.61 | 55.26 | 23.47 | 17.89 | 15.82 |
| 76.00 | 1.01 | 10.62 | 53.83 | 22.93 | 17.72 | 15.51 |
| 81.00 | 1.02 | 10.63 | 53.81 | 22.42 | 17.53 | 15.19 |
| 86.00 | 1.02 | 10.64 | 55.09 | 21.94 | 17.36 | 14.89 |
| 100.00 | 1.04 | 10.68 | 53.96 | 20.73 | 16.84 | 14.08 |

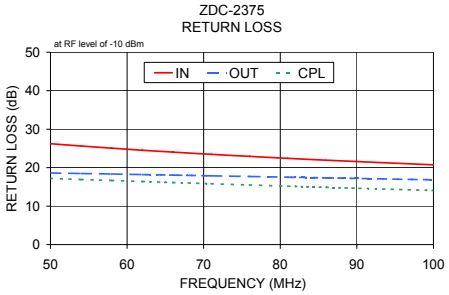
ZDC-2375
MAINLINE LOSS



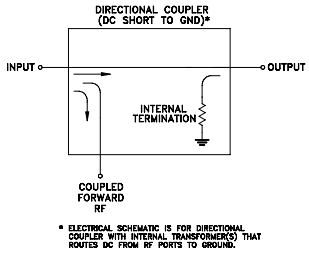

ZDC-2375
COUPLING & DIRECTIVITY




ZDC-2375
RETURN LOSS




## Electrical Schematic




Notes

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