

Coaxial

# Directional Couplers

75Ω 5 to 1500 MHz

Z30-75 SERIES

NEW!



K18

## Features

- very flat coupling
- very broad, multi-octave
- all welded construction
- protected by patent 6140887
- additional patent pending

## Applications

- instrumentation
- cable tv
- communication receivers & transmitters

## Electrical Specifications ( $T_{AMB} = -55^{\circ}\text{C}$ to $100^{\circ}\text{C}$ )

| MODEL NO.   | FREQ. RANGE (MHz)<br><br>f <sub>L</sub> -f <sub>U</sub> | COUPLING (dB)<br><br>Max. Flatness |      | MAINLINE LOSS (dB) |      |      |      |      |      | DIRECTIVITY (dB) |      |      |      | VSWR (:1)<br><br>Typ. | POWER INPUT, W |      |      | CASE STYLE | CONNECTION | PRICE \$<br><br>Qty. (1-24) |       |
|-------------|---------------------------------------------------------|------------------------------------|------|--------------------|------|------|------|------|------|------------------|------|------|------|-----------------------|----------------|------|------|------------|------------|-----------------------------|-------|
|             |                                                         |                                    |      | L                  |      | M    |      | U    |      | L                |      | M    |      |                       | U              |      | L    |            |            |                             | MU    |
|             |                                                         | Nom.                               | Typ. | Max.               | Typ. | Max. | Typ. | Max. | Typ. | Min.             | Typ. | Min. | Typ. | Min.                  | Typ.           | Max. | Max. |            |            |                             |       |
| Z30-10-4-75 | 5-1000                                                  | 10.5±0.5                           | ±0.7 | 1.5                | 2.5  | 1.5  | 2.3  | 1.5  | 2.2  | 22               | 16   | 21   | 14   | 19                    | —              | 1.30 | 0.5  | 1.0        | K18        | db                          | 29.95 |
| Z30-13-5-75 | 5-1000                                                  | 13.4±0.5                           | ±0.7 | 0.85               | 1.4  | 0.9  | 1.6  | 1.0  | 1.7  | 22               | 17   | 20   | 14   | 19                    | —              | 1.30 | 0.5  | 1.0        | K18        | db                          | 29.95 |
|             | 1000-1500                                               | 14.0±0.5                           | ±0.9 |                    |      | 1.2  | 2.2  |      |      |                  |      | 18   | —    |                       |                | 1.40 | 0.5  | 1.0        |            |                             |       |
| Z30-16-5-75 | 5-1000                                                  | 16.5±0.5                           | ±0.9 | 1.1                | 2.0  | 1.1  | 1.6  | 1.2  | 1.7  | 22               | 16   | 24   | 16   | 24                    | —              | 1.30 | 0.5  | 1.0        | K18        | db                          | 29.95 |
|             | 1000-1500                                               | 17.7±0.5                           | ±1.0 |                    |      | 1.3  | 1.9  |      |      |                  |      | 19   | —    |                       |                | 1.30 | 0.5  | 1.0        |            |                             |       |
| Z30-18-4-75 | 5-1000                                                  | 18.5±0.5                           | ±0.9 | 0.8                | 1.5  | 0.85 | 1.5  | 0.95 | 1.6  | 28               | 17   | 23   | 16   | 15                    | —              | 1.30 | 1.0  | 1.0        | K18        | db                          | 29.95 |

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  $f_U$ ]

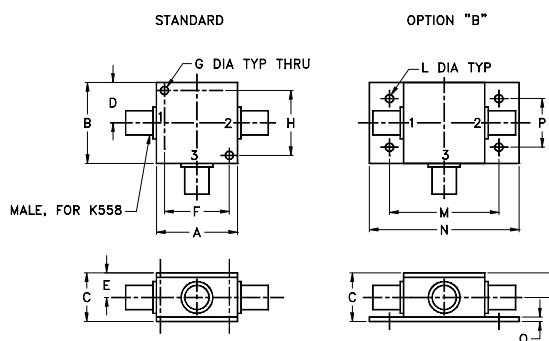
## Maximum Ratings

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

## Pin Connections

| PORT    | (db) |
|---------|------|
| INPUT   | 1    |
| OUTPUT  | 2    |
| COUPLED | 3    |

## Outline Drawing



## Outline Dimensions (inch/mm)

| A     | B     | C     | D     | E     | F     | G    | H     |
|-------|-------|-------|-------|-------|-------|------|-------|
| 1.25  | 1.25  | .75   | .63   | .38   | 1.000 | .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  |

REV. OR  
M79820  
Z30-10-4-75 EDR-5734  
Z30-13-5-75 EDR-5760  
Z30-16-5-75 EDR-5761  
Z30-18-4-75 EDR-5762  
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