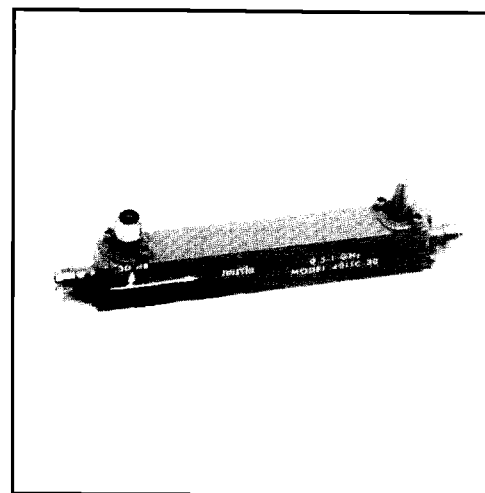


# RECEIVER COUPLERS

- Extremely Low Insertion Loss, Stripline Design
- High Directivity
- Low VSWR
- Directional Detectors with Matched RF Detector Available
- New Type N Connector Models



## SPECIFICATIONS

| APPLICATION | FREQ RANGE (MHz) | MODEL NO.   | COUPLING (dB) | DIRECTIVITY (dB) (Min) | INSERTION LOSS dB (Max) | VSWR                     |                      | FREQ** SENSITIVITY (dB) (Max) | POWER INPUT (Watts) | REFLECTED POWER  |               | CONN | WT Gr |
|-------------|------------------|-------------|---------------|------------------------|-------------------------|--------------------------|----------------------|-------------------------------|---------------------|------------------|---------------|------|-------|
|             |                  |             |               |                        |                         | PRIMARY LINE POWER (Max) | SECONDARY LINE (Max) |                               |                     | AVG. Watts (Max) | PEAK kW (Max) |      |       |
| CELLULAR    | 800-980          | CEL4011C-10 | 10±1.25       | 27.5                   | 0.7                     | 1.07                     | 1.15                 | ±0.75                         | 50                  | 5                | 3             | SMA  | 37    |
| CELLULAR    | 800-980          | CEL4011C-20 | 20±1.25*      | 25.0                   | 0.2                     | 1.07                     | 1.15                 | ±0.75                         | 50                  | 50               | 3             | SMA  | 34    |
| CELLULAR    | 800-980          | CEL3011-10  | 10±1.25       | 25.0                   | 0.7                     | 1.07                     | 1.15                 | ±0.75                         | 50                  | 5                | 3             | N    | 100   |
| CELLULAR    | 800-980          | CEL3011-20  | 20±1.25       | 25.0                   | 0.2                     | 1.07                     | 1.15                 | ±0.75                         | 50                  | 50               | 3             | N    | 100   |
| PCS         | 1710-2000        | CEL4012C-6  | 6±1.00        | 29.0                   | 1.75                    | 1.10                     | 1.15                 | ±0.60                         | 50                  | 2                | 3             | SMA  | 26    |
| PCS         | 1710-2000        | CEL4012C-10 | 10±1.25       | 27.0                   | 0.75                    | 1.05                     | 1.10                 | ±0.75                         | 50                  | 5                | 3             | SMA  | 26    |
| PCS         | 1710-2000        | CEL4012C-20 | 20±1.25       | 27.0                   | 0.20                    | 1.05                     | 1.10                 | ±0.75                         | 50                  | 50               | 3             | SMA  | 26    |
| PCS         | 1710-2000        | CEL4012C-30 | 30±1.25       | 27.0                   | 0.10                    | 1.05                     | 1.10                 | ±0.75                         | 50                  | 50               | 3             | SMA  | 26    |

\* 30 dB coupling also available upon request

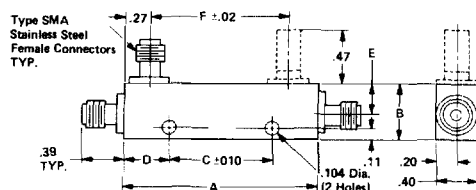
\*\* Frequency sensitivity is included in coupling variation

| APPLICATION | FREQ RANGE (MHz) | MODEL NO.   | COUPLING dB*** | DIRECTIVITY dB (Min) | TRUE INSERTION LOSS dB (Max) | VSWR               |                      | FREQ* SENSITIVITY dB (Max) | REFLECTED POWER |               | CONN | WT Gr |
|-------------|------------------|-------------|----------------|----------------------|------------------------------|--------------------|----------------------|----------------------------|-----------------|---------------|------|-------|
|             |                  |             |                |                      |                              | PRIMARY LINE (Max) | SECONDARY LINE (Max) |                            | AVG Watts (Max) | PEAK kW (Max) |      |       |
| PCS         | 1710-2200        | CEL4202B-6  | 6±1.5          | 20                   | 2.00                         | 1.35               | 1.5                  | ±0.4                       | 20              | 3             | SMA  | 80    |
|             | 1710-2200        | CEL4202B-10 | 10±1.5         | 20                   | 1.30                         | 1.35               | 1.50                 | ±0.1                       | 20              | 3             | SMA  | 83    |
|             | 1710-2200        | CEL4202B-20 | 20±1.5         | 20                   | 0.75                         | 1.35               | 1.50                 | ±0.1                       | 20              | 3             | SMA  | 83    |
|             | 1710-2200        | CEL3202B-10 | 10±1.5         | 22                   | 1.30                         | 1.35               | 1.50                 | ±0.1                       | 20              | 3             | N    | 128   |
|             | 1710-2200        | CEL3202B-20 | 20±1.5         | 22                   | 1.05                         | 1.35               | 1.50                 | ±0.4                       | 20              | 3             | N    | 128   |

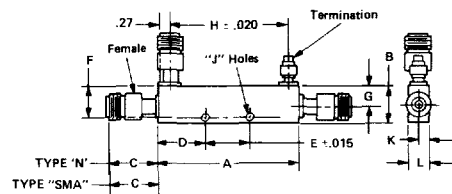
\*\*Frequency sensitivity is included in coupling variation

\*\*\*Coupling is referenced to output port

## OUTLINE DRAWINGS

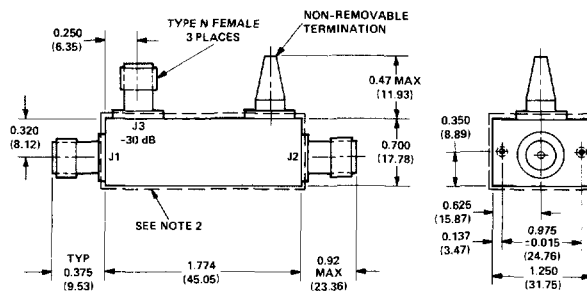


| Model No.        | A    | B   | C     | D   | E   | F    |
|------------------|------|-----|-------|-----|-----|------|
| CEL4011C-10      | 3.05 | .59 | 1.500 | .79 | .34 | 2.53 |
| CEL4011C-20      | 3.03 | .53 | 1.750 | .65 | .30 | 2.50 |
| CEL4012C-6       | 1.83 | .54 | .940  | .44 | .30 | 1.28 |
| CEL4012C-10, -20 | 1.83 | .54 | .940  | .44 | .30 | 1.28 |
| CEL4012C-30      | 1.83 | .59 | .940  | .44 | .35 | 1.28 |



| Model No.     | A    | B   | C    | D    | E     | F   | G   | H     | K   | L   |
|---------------|------|-----|------|------|-------|-----|-----|-------|-----|-----|
| CEL3202B-10   | 3.24 | .88 | 1.10 | 1.12 | 1.000 | .71 | .48 | 2.717 | .28 | .56 |
| CEL3202B-20   | 3.48 | .73 | 1.10 | .58  | 2.319 | .62 | .44 | 2.943 | .26 | .53 |
| CEL4202B-6,10 | 3.24 | .88 | .38  | 1.12 | 1.000 | .71 | .48 | 2.717 | .28 | .56 |
| CEL4202B-20   | 3.48 | .73 | .38  | .58  | 2.319 | .62 | .44 | 2.943 | .26 | .53 |

J Holes: .104 ±.004-.002



TOL: ±0.020 (0.51)

NOTES:  
1. DIMENSIONS IN MILLIMETERS ARE SHOWN IN PARENTHESES.  
2. DOTTED AREA REPRESENTS 0.020 MAX SEALANT BUILDUP PER SURFACE.

MODEL CEL3011-10, 20