

# Solder Back Indoor/Outdoor Directional Couplers & Tapoffs

SDC-4, SCW, & SRT -x Series



SDC-4

## ○ Features & Benefits

- 4 Port 1 GHz Tap
- 120 dB RFI Shielding
- Available in 6 Values from 8 to 30 dB
- 5 to 1000 MHz Frequency Range

## ○ Specifications

### SDC-4

| Tap Value                      | 8 dB | 12 dB | 16 dB | 20 dB | 24 dB | 30 dB |
|--------------------------------|------|-------|-------|-------|-------|-------|
| Insertion Loss (dB max.)       |      |       |       |       |       |       |
| 5-300 MHz                      | N/A  | 3.5   | 1.5   | 0.8   | 0.8   | 0.7   |
| 300-600 MHz                    | N/A  | 3.8   | 1.8   | 1.0   | 0.9   | 0.9   |
| 600-1000 MHz                   | N/A  | 4.2   | 2.5   | 1.4   | 1.3   | 1.2   |
| Return Loss (in/out) (dB min.) |      |       |       |       |       |       |
| 5-300 MHz                      | 16   | 18    | 16    | 18    | 18    | 18    |
| 300-600 MHz                    | 18   | 18    | 18    | 18    | 18    | 18    |
| 600-1000 MHz                   | 15   | 15    | 15    | 15    | 15    | 15    |
| Isolation (Tap to Tap) (dB)    |      |       |       |       |       |       |
| 5-30 MHz                       | 22   | 22    | 22    | 22    | 22    | 22    |
| 30-600 MHz                     | 25   | 25    | 25    | 25    | 25    | 25    |
| 600-1000 MHz                   | 22   | 22    | 22    | 22    | 22    | 22    |
| Isolation (Out to Tap) (dB)    |      |       |       |       |       |       |
| 5-300 MHz                      | N/A  | 24    | 28    | 36    | 38    | 43    |
| 300-600 MHz                    | N/A  | 26    | 28    | 33    | 35    | 39    |
| 600-1000 MHz                   | N/A  | 25    | 25    | 26    | 28    | 32    |
| Tap Tolerance (+/-) (dB)       | 1.5  | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   |



SCW



SRT

## ○ Features & Benefits

- 1 GHz Bandwidth
- 1 Port Directional Couplers - "L" Style (SCW), "T" Style (SRT)
- 120 dB RFI Shielding
- Die Cast Housing

## ○ Specifications

### SRT/SCW

| Tap Value                 | 4   | 6   | 9   | 12  | 16  | 20  | 24  | 27  | 30  |
|---------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thru-line Loss (dB)       |     |     |     |     |     |     |     |     |     |
| 5 - 400 MHz:              | 3.5 | 3.0 | 1.2 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 |
| 400 - 900 MHz:            | 4.0 | 3.5 | 1.6 | 1.5 | 0.7 | 0.7 | 0.6 | 0.6 | 0.6 |
| 900 - 1000 MHz:           | 4.5 | 4.0 | 2.0 | 2.0 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Input Return Loss (dB)    |     |     |     |     |     |     |     |     |     |
| 5 - 400 MHz:              | 15  | 15  | 15  | 20  | 20  | 20  | 20  | 20  | 20  |
| 400 - 900 MHz:            | 12  | 13  | 16  | 18  | 18  | 18  | 18  | 18  | 18  |
| Tap Down Loss (±1.0 dB):  | 3   | 6   | 9   | 12  | 16  | 20  | 24  | 27  | 30  |
| Isolation Out-to-Tap (dB) |     |     |     |     |     |     |     |     |     |
| 5 - 400 MHz:              | 20  | 22  | 24  | 30  | 30  | 36  | 36  | 40  | 40  |
| 400 - 1000 MHz:           | 18  | 20  | 20  | 24  | 26  | 30  | 30  | 30  | 30  |

## ○ Ordering Information (Specify Tap Value)

| Model | Stock No. | Description                                                                               |
|-------|-----------|-------------------------------------------------------------------------------------------|
| SCW   | 1930      | Directional Tap, 1 Output 5-1000 MHz, L Style, Values: 4, 6, 9, 12, 16, 20, 24, 27, 30 dB |
| SDC-4 | 1950      | Directional Tap, 4 Output 5-1000 MHz, In-Line Style, Values: 8, 12, 16, 20, 24, 30 dB     |
| SRT   | 1940      | Directional Tap, 1 Output 5-1000 MHz, T Style, Values: 4, 6, 9, 12, 16, 20, 24, 27, 30 dB |

Distribution

# Solder Back Directional Couplers

SRT-2,4, & 8A



Distribution

Blonder Tongue 's SRT Series of indoor 1GHz taps are the standard for directional couplers used in broadband systems such as those in educational, correctional, commercial, and MDU's. Models are available with 2, 4, and 8 tap ports and have tap values from 35 dB to 4 dB (model dependant) in 3 dB increments. All models have die-cast housings and provide RFI shielding of 120 dB.

## Features & Benefits

- 1 GHz Bandwidth
- 2,4 and 8 Port Models
- 120 dB RFI Shielding
- Diecast Housing
- Built-in Ground Block

## Specifications

### SRT-2A

#### Tap Value

|                       | 4dB | 8dB | 11dB | 14dB | 17dB | 20dB | 23dB | 26dB | 29dB | 32dB |
|-----------------------|-----|-----|------|------|------|------|------|------|------|------|
| Insertion Loss        |     |     |      |      |      |      |      |      |      |      |
| 5 - 50 MHz:           | *   | 3.0 | 2.3  | 1.2  | 1.0  | 0.9  | 0.7  | 0.7  | 0.7  | 0.7  |
| 50 - 450 MHz:         | *   | 3.2 | 2.5  | 1.2  | 1.0  | 0.9  | 0.7  | 0.7  | 0.7  | 0.7  |
| 450 - 750 MHz:        | *   | 3.3 | 2.6  | 1.5  | 1.3  | 1.2  | 1.2  | 1.0  | 1.0  | 1.0  |
| 750 - 1000 MHz:       | *   | 3.5 | 3.0  | 2.2  | 1.8  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  |
| Return Loss (IN/OUT)  |     |     |      |      |      |      |      |      |      |      |
| 5 - 10 MHz:           | 18  | 16  | 18   | 18   | 18   | 18   | 18   | 18   | 18   | 18   |
| 10 - 50 MHz:          | 20  | 18  | 20   | 20   | 20   | 20   | 20   | 20   | 20   | 20   |
| 50 - 750 MHz:         | 18  | 18  | 20   | 20   | 20   | 20   | 20   | 20   | 20   | 20   |
| 750 - 1000 MHz:       | 16  | 16  | 16   | 16   | 16   | 16   | 16   | 16   | 16   | 16   |
| Return Loss (Tap)     |     |     |      |      |      |      |      |      |      |      |
| 5 - 10 MHz:           |     |     |      |      |      | 16   |      |      |      |      |
| 10 - 50 MHz:          |     |     |      |      |      | 18   |      |      |      |      |
| 50 - 750 MHz:         |     |     |      |      |      | 20   |      |      |      |      |
| 750 - 1000 MHz:       |     |     |      |      |      | 18   |      |      |      |      |
| Isolation Tap-to-Tap: |     |     |      |      |      |      |      |      |      |      |
| 5 - 10 MHz:           |     |     |      |      |      | 22   |      |      |      |      |
| 10 - 450 MHz:         |     |     |      |      |      | 26   |      |      |      |      |
| 450 - 750 MHz:        |     |     |      |      |      | 25   |      |      |      |      |
| 750 - 1000 MHz:       |     |     |      |      |      | 22   |      |      |      |      |
| Isolation Out-to-Tap  |     |     |      |      |      |      |      |      |      |      |
| 5 - 50 MHz:           | -   | 26  | 31   | 33   | 35   | 36   | 38   | 38   | 38   | 40   |
| 50 - 450 MHz:         | -   | 23  | 26   | 28   | 32   | 33   | 35   | 35   | 35   | 35   |
| 450 - 750 MHz:        | -   | 23  | 26   | 26   | 28   | 30   | 30   | 30   | 32   | 35   |
| 750 - 1000 MHz:       | -   | 22  | 24   | 25   | 26   | 29   | 30   | 30   | 32   | 35   |
| Tap Tolerance (± dB)  |     |     |      |      |      |      |      |      |      |      |
| 5 - 450 MHz:          | 1.0 | 1.0 | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  |
| 450 - 750 MHz:        | 1.0 | 1.0 | 1.0  | 1.5  | 1.5  | 1.5  | 1.5  | 1.5  | 1.5  | 1.5  |
| 750 - 1000 MHz:       | 1.0 | 1.5 | 1.5  | 1.5  | 1.5  | 1.5  | 1.5  | 2.0  | 2.0  | 2.0  |

\* Terminated

# Solder Back Directional Couplers

## SRT-2,4, & 8A

### ○ Specifications

#### SRT-4A

| Tap Value                  | In dB | 8   | 11  | 14  | 17  | 20  | 23  | 26  | 29  | 32  | 35  |
|----------------------------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Insertion Loss (dB)        |       |     |     |     |     |     |     |     |     |     |     |
| 5 - 50 MHz:                | *     | 3.5 | 1.9 | 1.2 | 0.8 | 0.9 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| 50 - 450 MHz:              | *     | 3.6 | 2.2 | 1.2 | 1.0 | 0.9 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| 450 - 750 MHz:             | *     | 3.8 | 2.3 | 1.5 | 1.2 | 1.0 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 |
| 750 - 1000 MHz:            | *     | 4.4 | 2.5 | 2.0 | 1.4 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Return Loss (IN/OUT) (dB)  |       |     |     |     |     |     |     |     |     |     |     |
| 5 - 10 MHz:                | 18    | 18  | 16  | 18  | 18  | 18  | 18  | 18  | 18  | 18  | 18  |
| 10 - 50 MHz:               | 20    | 20  | 18  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  |
| 50 - 450 MHz:              | 18    | 18  | 18  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  |
| 450 - 750 MHz:             | 18    | 18  | 18  | 18  | 18  | 18  | 18  | 18  | 18  | 18  | 18  |
| 750 - 1000 MHz:            | 16    | 16  | 16  | 16  | 16  | 16  | 16  | 16  | 16  | 16  | 16  |
| Return Loss (TAP) (dB)     |       |     |     |     |     |     |     |     |     |     |     |
| 5 - 10 MHz:                |       |     |     |     |     |     | 18  |     |     |     |     |
| 10 - 750 MHz:              |       |     |     |     |     |     | 20  |     |     |     |     |
| 750 - 1000 MHz:            |       |     |     |     |     |     | 18  |     |     |     |     |
| Isolation Tap-to-Tap (dB): |       |     |     |     |     |     |     |     |     |     |     |
| 5 - 10 MHz:                |       |     |     |     |     |     | 22  |     |     |     |     |
| 10 - 450 MHz:              |       |     |     |     |     |     | 26  |     |     |     |     |
| 450 - 750 MHz:             |       |     |     |     |     |     | 25  |     |     |     |     |
| 750 - 1000 MHz:            |       |     |     |     |     |     | 22  |     |     |     |     |
| Isolation Out-to-Tap (dB)  |       |     |     |     |     |     |     |     |     |     |     |
| 5 - 10 MHz:                | -     | 24  | 28  | 35  | 36  | 38  | 38  | 40  | 43  | 45  |     |
| 10 - 50 MHz:               | -     | 24  | 28  | 32  | 35  | 35  | 38  | 38  | 39  | 40  |     |
| 50 - 450 MHz:              | -     | 26  | 28  | 30  | 32  | 35  | 36  | 36  | 39  | 40  |     |
| 450 - 750 MHz:             | -     | 26  | 26  | 25  | 30  | 32  | 34  | 34  | 35  | 36  |     |
| 750 - 1000 MHz:            | -     | 25  | 25  | 25  | 26  | 28  | 30  | 32  | 35  | 36  |     |
| Tap Tolerance (± dB)       |       |     |     |     |     |     |     |     |     |     |     |
| 5 - 450 MHz:               | 1.0   | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |     |
| 450 - 750 MHz:             | 1.0   | 1.0 | 1.5 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |     |
| 750 - 1000 MHz:            | 1.5   | 1.5 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |     |

### ○ Specifications

#### SRT-8A

| Tap Value                  | In dB | 11  | 14  | 17  | 20  | 23  | 26  | 29  | 32  | 35  |
|----------------------------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Insertion Loss (dB)        |       |     |     |     |     |     |     |     |     |     |
| 5 - 50 MHz:                | *     | 3.5 | 1.9 | 1.2 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 |
| 50 - 450 MHz:              | *     | 4.0 | 2.3 | 1.5 | 1.0 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 |
| 450 - 750 MHz:             | *     | 4.2 | 2.4 | 1.8 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 750 - 1000 MHz:            | *     | 4.5 | 2.5 | 2.0 | 1.4 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 |
| Return Loss (IN/OUT) (dB)  |       |     |     |     |     |     |     |     |     |     |
| 5 - 10 MHz:                | 18    | 18  | 16  | 18  | 18  | 18  | 18  | 18  | 18  | 18  |
| 10 - 50 MHz:               | 20    | 20  | 18  | 20  | 20  | 20  | 20  | 20  | 20  | 20  |
| 50 - 450 MHz:              | 20    | 20  | 18  | 20  | 20  | 20  | 20  | 20  | 20  | 20  |
| 450 - 750 MHz:             | 18    | 18  | 18  | 18  | 18  | 18  | 18  | 18  | 18  | 18  |
| 750 - 1000 MHz:            | 16    | 16  | 16  | 16  | 16  | 16  | 16  | 16  | 16  | 16  |
| Return Loss (TAP) (dB)     |       |     |     |     |     |     |     |     |     |     |
| 5 - 10 MHz:                |       |     |     |     |     |     | 18  |     |     |     |
| 10 - 750 MHz:              |       |     |     |     |     |     | 20  |     |     |     |
| 750 - 1000 MHz:            |       |     |     |     |     |     | 18  |     |     |     |
| Isolation Tap-to-Tap (dB): |       |     |     |     |     |     |     |     |     |     |
| 5 - 10 MHz:                |       |     |     |     |     |     | 22  |     |     |     |
| 10 - 450 MHz:              |       |     |     |     |     |     | 26  |     |     |     |
| 450 - 750 MHz:             |       |     |     |     |     |     | 25  |     |     |     |
| 750 - 1000 MHz:            |       |     |     |     |     |     | 22  |     |     |     |
| Isolation Out-to-Tap (dB)  |       |     |     |     |     |     |     |     |     |     |
| 5 - 10 MHz:                | -     | 30  | 28  | 36  | 36  | 38  | 38  | 38  | 38  | 38  |
| 10 - 50 MHz:               | -     | 30  | 28  | 35  | 36  | 35  | 36  | 36  | 36  | 36  |
| 50 - 450 MHz:              | -     | 26  | 25  | 32  | 33  | 32  | 32  | 32  | 32  | 32  |
| 450 - 750 MHz:             | -     | 24  | 24  | 30  | 30  | 30  | 30  | 30  | 30  | 30  |
| 750 - 1000 MHz:            | -     | 24  | 24  | 26  | 26  | 28  | 28  | 28  | 28  | 30  |
| Tap Tolerance (± dB)       |       |     |     |     |     |     |     |     |     |     |
| 5 - 450 MHz:               | 1.0   | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 450 - 750 MHz:             | 1.5   | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| 750 - 1000 MHz:            | 2.0   | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |

\* Terminated

Distribution

### ○ Ordering Information (Specify Tap Value)

| Model  | Stock No. | Description                                                                                           |
|--------|-----------|-------------------------------------------------------------------------------------------------------|
| SRT-2a | 1942      | Directional Tap, 2 Output 5-1000 MHz, In-Line Style, Values: 4, 8, 11, 14, 17, 20, 23, 26, 29, 32 dB  |
| SRT-4a | 1944      | Directional Tap, 4 Output 5-1000 MHz, In-Line Style, Values: 8, 11, 14, 17, 20, 23, 26, 29, 32, 35 dB |
| SRT-8a | 1948      | Directional Tap, 8 Output 5-1000 MHz, In-Line Style, Values: 11, 14, 17, 20, 23, 26, 29, 32, 35 dB    |