

# DCL Directional Couplers

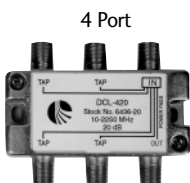
## Trunk Grade Passives

The DCL Series are directional couplers and are available in 1, 2 and 4 port models. All DCL Series have power passing capability on the through line (in/out ports) with tap port(s) DC blocked.

### ○ Features & Benefits

- Professional Trunk Grade
- 10-2150 MHz Bandwidth
- Gold Plated F Connector Squeeze Pins
- Zinc Die Cast Hybrid Case

### ○ Specifications



#### 1 Port Directional Couplers

|         | Tap Value | Frequency Range | Insertion In-Out | Isolation In-Tap | Isolation Out-Tap | Isolation Port-Port | Return Loss In | Return Loss Out | Return Loss Port |
|---------|-----------|-----------------|------------------|------------------|-------------------|---------------------|----------------|-----------------|------------------|
| DCL-108 | 8         | 10 - 950        | 2.5              | 8                | 20                | -                   | 13             | 18              | 12               |
|         |           | 950 - 1450      | 2.7              | 8.5              | 18                | -                   | 13             | 18              | 12               |
|         |           | 1450 - 2150     | 4.5              | 8.5              | 16                | -                   | 10             | 18              | 12               |
| DCL-112 | 12        | 10 - 950        | 1.3              | 11.5             | 20                | -                   | 14             | 18              | 14               |
|         |           | 950 - 1450      | 1.5              | 12               | 19                | -                   | 14             | 18              | 14               |
|         |           | 1450 - 2150     | 2.5              | 12.5             | 16                | -                   | 10             | 18              | 12               |
| DCL-116 | 16        | 10 - 950        | 1.5              | 15               | 24                | -                   | 14             | 18              | 14               |
|         |           | 950 - 1450      | 1.5              | 15               | 23                | -                   | 14             | 18              | 14               |
|         |           | 1450 - 2150     | 2.5              | 16               | 20                | -                   | 10             | 13              | 12               |
| DCL-120 | 20        | 10-950          | 1.5              | 19               | 28                | -                   | 14             | 18              | 12               |
|         |           | 950 - 1450      | 2.0              | 19               | 28                | -                   | 14             | 18              | 12               |
|         |           | 1450 - 2150     | 2.5              | 20               | 25                | -                   | 10             | 11              | 11               |
| DCL-124 | 24        | 10-950          | 1.4              | 24               | 28                | -                   | 15             | 18              | 12               |
|         |           | 950 - 1450      | 1.5              | 24               | 28                | -                   | 15             | 18              | 12               |
|         |           | 1450 - 2150     | 2.3              | 24               | 26                | -                   | 10             | 11              | 11               |
| DCL-128 | 28        | 10-950          | 1.4              | 28               | 32                | -                   | 15             | 18              | 14               |
|         |           | 950 - 1450      | 1.5              | 28.5             | 30                | -                   | 15             | 18              | 14               |
|         |           | 1450 - 2150     | 2.4              | 28.5             | 28                | -                   | 10             | 11              | 12               |

#### 2 Port Directional Couplers

|         |    |             |     |      |    |    |    |    |    |
|---------|----|-------------|-----|------|----|----|----|----|----|
| DCL-212 | 12 | 10 - 950    | 2.2 | 12   | 25 | 20 | 16 | 15 | 11 |
|         |    | 950 - 1450  | 2.5 | 12   | 28 | 17 | 16 | 15 | 11 |
|         |    | 1450 - 2150 | 4.1 | 13   | 20 | 15 | 12 | 15 | 11 |
| DCL-216 | 16 | 10 - 950    | 1.3 | 15   | 26 | 20 | 16 | 16 | 12 |
|         |    | 950 - 1450  | 1.8 | 16   | 28 | 17 | 16 | 16 | 12 |
|         |    | 1450 - 2150 | 3.7 | 17   | 22 | 15 | 10 | 16 | 12 |
| DCL-220 | 20 | 10 - 950    | 1.5 | 19   | 28 | 20 | 16 | 16 | 14 |
|         |    | 950 - 1450  | 1.5 | 20   | 28 | 17 | 16 | 16 | 14 |
|         |    | 1450 - 2150 | 2.3 | 21   | 26 | 17 | 10 | 12 | 13 |
| DCL-224 | 24 | 10 - 950    | 1.3 | 23   | 30 | 20 | 16 | 17 | 15 |
|         |    | 950 - 1450  | 1.3 | 23   | 30 | 18 | 16 | 17 | 15 |
|         |    | 1450 - 2150 | 2.0 | 25   | 30 | 18 | 11 | 14 | 11 |
| DCL-228 | 28 | 10 - 950    | 1.3 | 27   | 30 | 22 | 16 | 17 | 14 |
|         |    | 950 - 1450  | 1.3 | 28   | 30 | 18 | 16 | 17 | 14 |
|         |    | 1450 - 2150 | 2.0 | 28.5 | 30 | 18 | 11 | 15 | 12 |

#### 4 Port Directional Couplers

|         |    |             |     |    |    |    |    |    |    |
|---------|----|-------------|-----|----|----|----|----|----|----|
| DCL-412 | 12 | 10 - 950    | 5.0 | 13 | 28 | 30 | 10 | 13 | 12 |
|         |    | 950 - 1450  | 4.6 | 12 | 28 | 19 | 10 | 13 | 12 |
|         |    | 1450 - 2150 | 5.5 | 14 | 26 | 14 | 10 | 10 | 12 |
| DCL-416 | 16 | 10 - 950    | 2.4 | 16 | 30 | 30 | 12 | 15 | 12 |
|         |    | 950 - 1450  | 3.0 | 16 | 28 | 26 | 12 | 15 | 12 |
|         |    | 1450 - 2150 | 5.0 | 17 | 26 | 22 | 10 | 10 | 12 |
| DCL-420 | 20 | 10 - 950    | 1.3 | 20 | 30 | 24 | 12 | 15 | 14 |
|         |    | 950 - 1450  | 1.5 | 20 | 28 | 28 | 12 | 15 | 14 |
|         |    | 1450 - 2150 | 2.1 | 22 | 23 | 30 | 14 | 12 | 12 |
| DCL-424 | 24 | 10 - 950    | 1.3 | 24 | 33 | 26 | 12 | 15 | 16 |
|         |    | 950 - 1450  | 1.5 | 24 | 33 | 25 | 12 | 15 | 16 |
|         |    | 1450 - 2150 | 2.1 | 25 | 28 | 21 | 12 | 14 | 16 |

### ○ Ordering Information

| Model   | Stock No. | Description                                                                                    |
|---------|-----------|------------------------------------------------------------------------------------------------|
| DCL-1XX | 6426      | Directional Tap, 1 Output 10-2150 MHz, Power Passing Thru Pt, Values: 8, 12, 16, 20, 24, 28 dB |
| DCL-2XX | 6431      | Directional Tap, 2 Output 10-2150 MHz, Power Passing Thru Pt, Values: 12, 16, 20, 24, 28 dB    |
| DCL-4XX | 6436      | Directional Tap, 4 Output 10-2150 MHz, Power Passing Thru Pt, Values: 12, 16, 20, 24 dB        |