



## DUAL DIRECTIONAL COUPLER

**CD10-0114**

The CD10-0114 is a broadband, high directivity 0.7-14.7 GHz, 10 dB dual directional coupler. The multisection tri-plate stripline design exhibits excellent coupling flatness and VSWR at all ports. Applications include reflectometry (return loss) measurements, level monitoring, etc. Custom designs are also available, contact the factory for details.

### Features

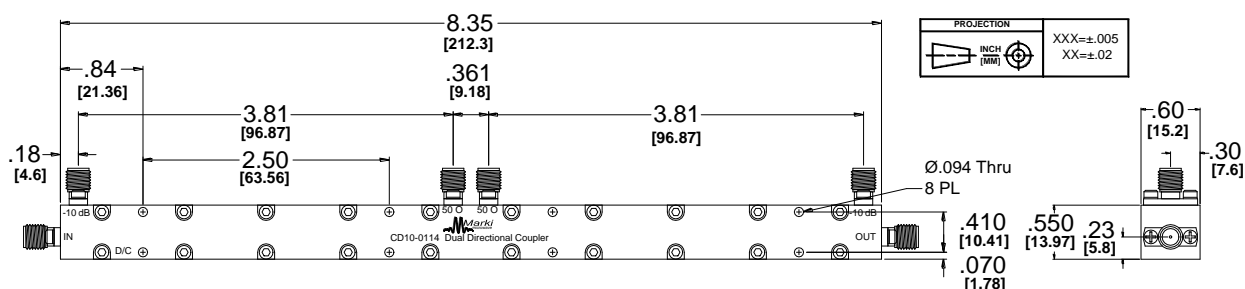
- Dual Directional
- Excellent Coupling Flatness
- High Directivity
- Low VSWR
- [Microwave Power Dividers & Couplers App Note](#)

### Electrical Specifications

| Parameter <sup>1</sup>               | Frequency Range (GHz) | Min | Typ  | Max   |
|--------------------------------------|-----------------------|-----|------|-------|
| Mean Coupling (dB)                   | 0.7-14.7              |     | 10   |       |
| Amplitude Flatness (dB) <sup>2</sup> |                       |     | ±0.6 | ±1.75 |
| Direct Line Insertion Loss (dB)      |                       |     |      | 3     |
| VSWR                                 |                       |     | 1.17 | 1.34  |
| Directivity (dB)                     | 0.7-12                | 20  | 23   |       |
|                                      | 12-14.7               | 15  | 18   |       |
| Weight (g)                           |                       |     | 132  |       |

<sup>1</sup>Specifications guaranteed when operated in a 50Ω system.

<sup>2</sup>Deviation from average coupling.



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## Typical Performance

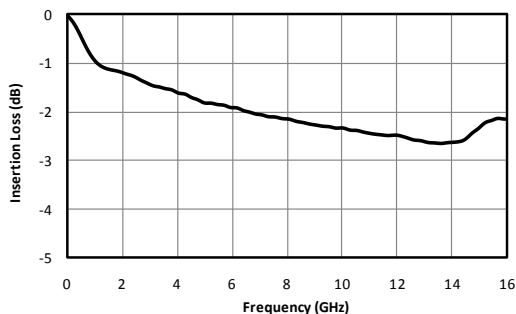


Fig. 1. Direct line insertion loss.

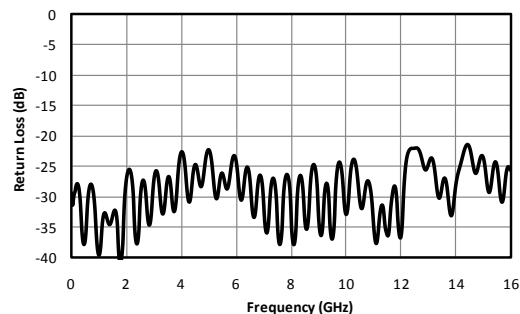


Fig. 2. Typical port return loss.

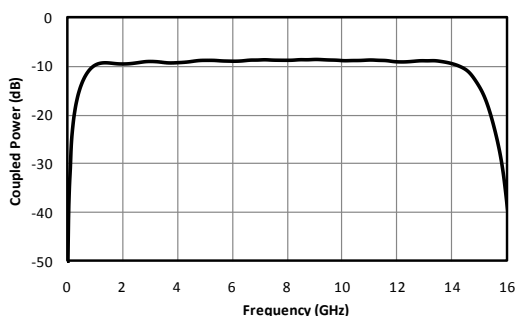


Fig. 3. Coupled port power.

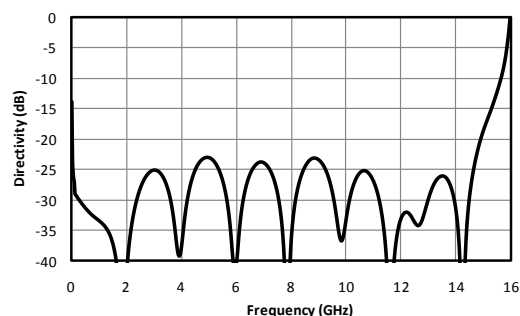


Fig. 4. Typical directivity.

| Model Number | Description   |
|--------------|---|
| CD10-0114    | 0.7-14.7 GHz High Directivity, 10 dB Dual Directional Coupler with SMA connectors |

<sup>1</sup>Default is SMA female connectors. Consult factory for other connector options.

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