

## LEAD-FREE / RoHS-COMPLIANT

### DIRECTIONAL COUPLER

**C20-0R612**

The C20-0R612 is a broadband 0.6-12 GHz, 20 dB directional coupler. The multisection tri-plate stripline design exhibits excellent coupling flatness and VSWR at all ports. Custom designs are also available; contact the factory for details.

#### Features

- Broadband Performance
- High Directivity
- Low VSWR

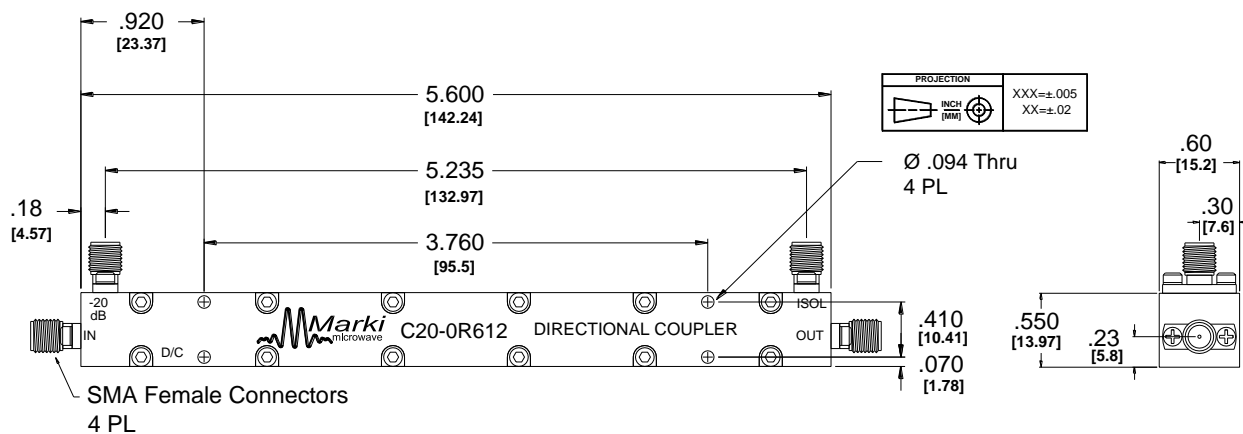


#### Electrical Specifications

| Parameter <sup>1</sup>               | Frequency Range (GHz) | Min | Typ  | Max  |
|--------------------------------------|-----------------------|-----|------|------|
| Mean Coupling (dB)                   | 0.6-12                |     | 20   |      |
| Amplitude Flatness (dB) <sup>2</sup> |                       |     | ±0.6 | ±1.2 |
| Direct Line Insertion Loss (dB)      | DC-12                 |     |      | 1.5  |
| VSWR                                 | 0.6-12                |     | 1.2  | 1.35 |
| Directivity (dB)                     |                       | 15  | 22   |      |
| Weight (g)                           |                       |     | 90   |      |

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

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



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## Typical Performance

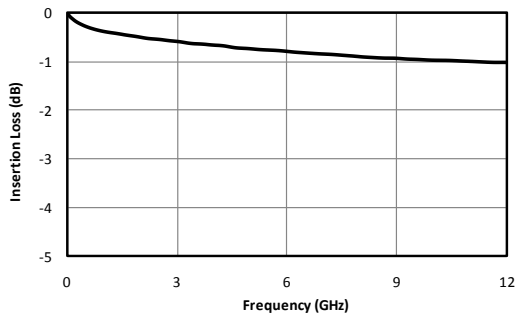


Fig. 1. Direct line insertion loss.

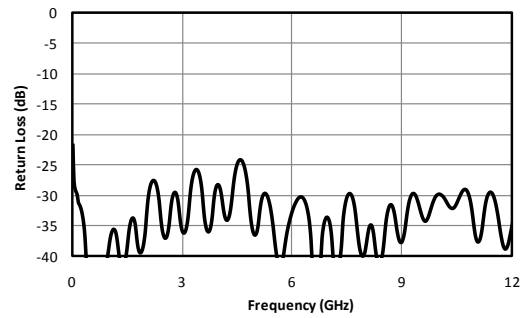


Fig. 2. Typical port return loss.

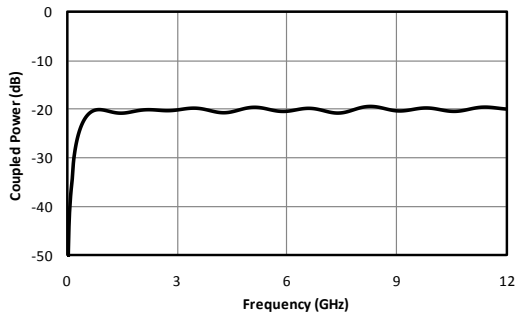


Fig. 3. Coupled port power.

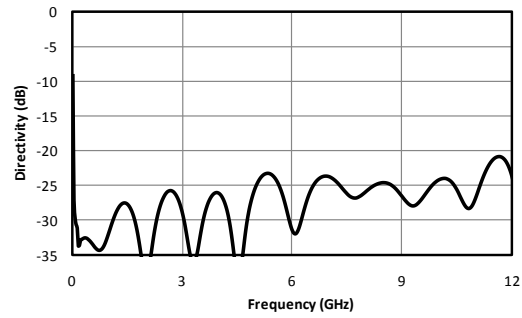


Fig. 4. Typical directivity.

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| Model Number | Description  |
|--------------|--|
| C20-0R612    | 0.6-12 GHz 20 dB Directional Coupler<br>with SMA connectors <sup>1</sup> , <b>LEAD-FREE/RoHS COMPLIANT</b> |

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

**Revision History**

| Revision code | Revision Date | Comment                      |
|---------------|---------------|------------------------------|
| B             | 4/2020        | Updated Direct Line IL specs |

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