

LEAD-FREE / RoHS-COMPLIANT

DIRECTIONAL COUPLER

C13-0150

The C13-0150 is an ultra broadband 1-50 GHz, 13 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

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

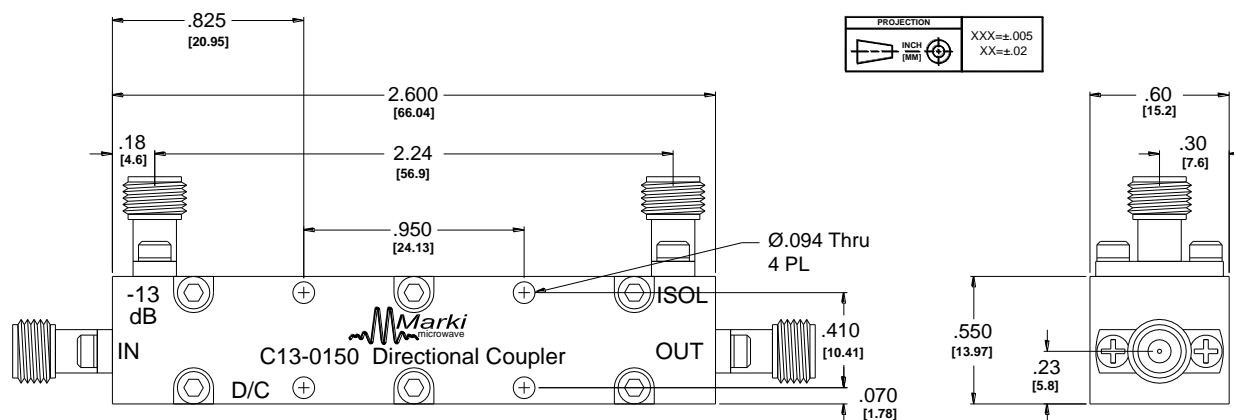


Electrical Specifications

| Parameter ¹ | Frequency Range (GHz) | Min | Typ | Max |
|--------------------------------------|-----------------------|-----|-------|-------|
| Mean Coupling (dB) | 1-50 | | 13 | |
| Amplitude Flatness (dB) ² | | | ±0.75 | ±1.75 |
| Direct Line Insertion Loss (dB) | DC-50 | | | 2.2 |
| VSWR | 1-20 | | 1.25 | 1.4 |
| | 20-50 | | | 1.65 |
| Directivity (dB) | 1-30 | 13 | 16 | |
| | 30-50 | 9 | 12 | |
| Weight (g) | | | 45 | |

¹Specifications guaranteed when operated in a 50Ω system.

²Deviation from average coupling.



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Page 2

Typical Performance

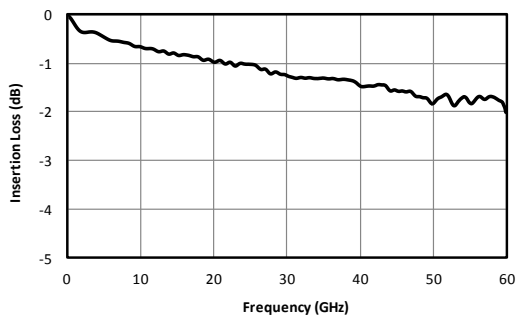


Fig. 1. Direct line insertion loss.

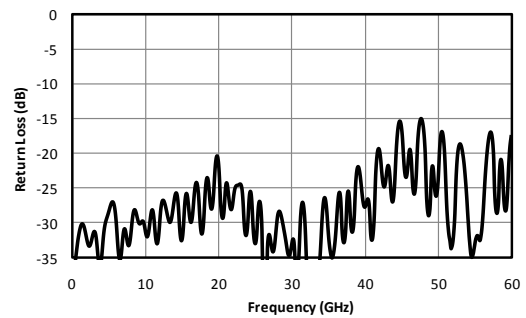


Fig. 2. Typical port return loss.

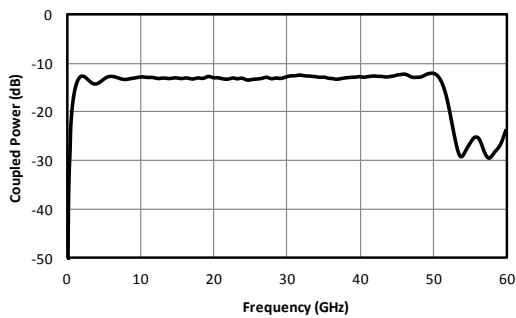


Fig. 3. Coupled port power.

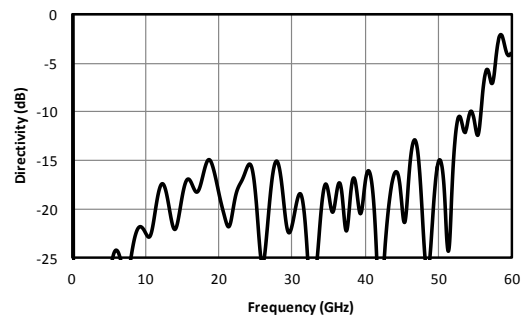


Fig. 4. Typical directivity.

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C13-0150

Page 3

| Model Number | Description |
|--------------|---|
| C13-0150 | 1-50 GHz 13 dB Directional Coupler with 2.4 mm connectors ¹ , LEAD-FREE/RoHS COMPLIANT |

¹Default is 2.4 mm 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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