

C10-0450

DIRECTIONAL COUPLER

DEVICE OVERVIEW

General Description

The C10-0450 is a broadband 4-50 GHz, 10 dB directional coupler. The multisection triplate stripline design exhibits excellent coupling flatness and VSWR to 50 GHz. Custom designs are also available, contact the factory for details.

[Download s-parameters here](#)

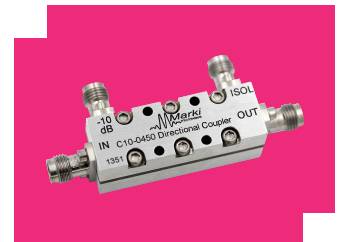
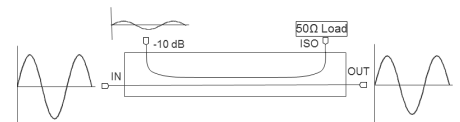
Features

- Broadband Performance
- Excellent Coupling Flatness
- High Directivity
- Low VSWR

Applications

N/A

Functional Block Diagram



Part Ordering Options

Part Number	Description	Package	Packing Size	Green Status	Product Lifecycle	Export Classification
C10-0450	DIRECTIONAL COUPLER	-	-	RoHS	Released	EAR99

Table Of Contents

■ Device Overview

- General Description
- Features
- Applications
- Functional Block Diagram

■ Revision History

■ Specifications

- Absolute Maximum Ratings
- Package Information
- Electrical Specifications
- Typical Performance Plots

■ Mechanical Data

- Outline Drawing

Revision History

Revision Code	Revision Date	Comment
H	2020-04-01	Updated Direct Line IL specs

Specifications

Absolute Maximum Ratings

Parameter	Maximum Rating	Unit
RF Power Handling	15	W

Package Information

Parameter	Details	Rating
Weight	-	35g
Dimensions	-	40.6x13.97 mm

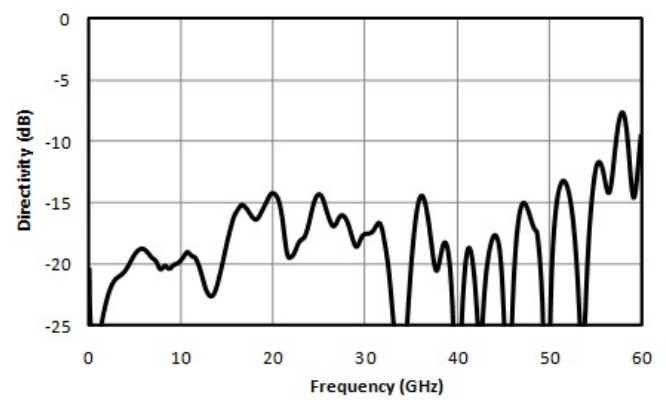
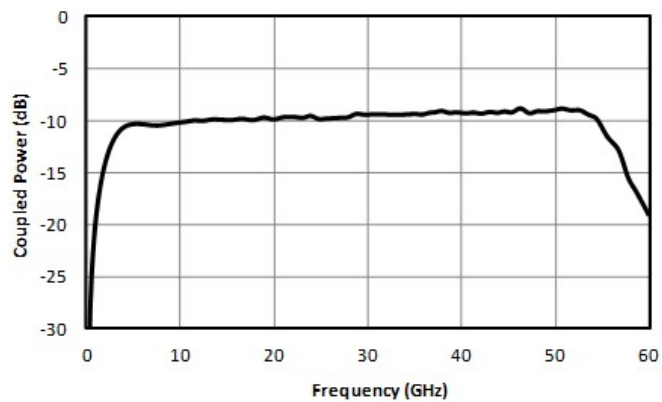
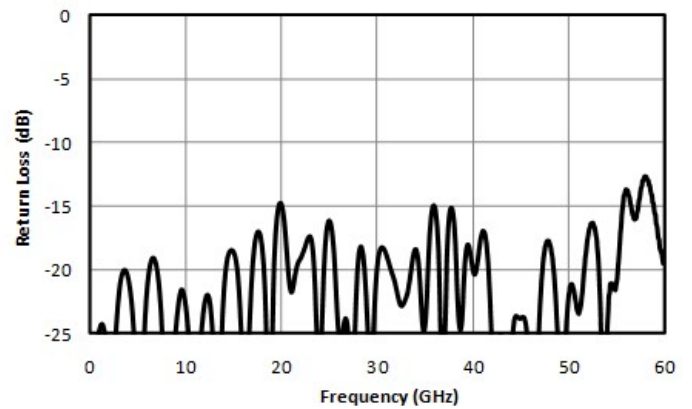
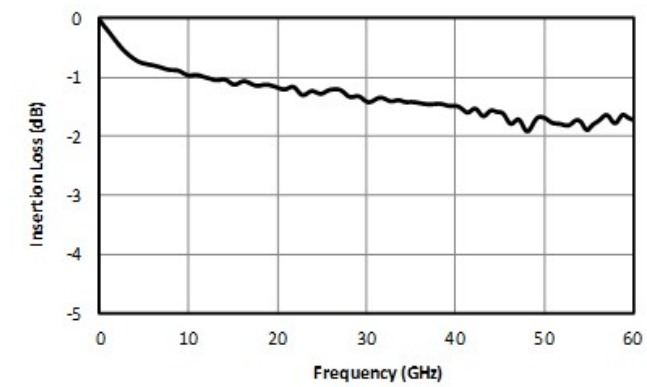
Electrical Specifications

Specifications guaranteed when operated in a 50Ω system.

Parameter	Test Conditions	Minimum Frequency (GHz)	Maximum Frequency (GHz)	Min	Typ	Max	Unit
Mean Coupling	-	4	50	-	10	-	dB
Direct Line Insertion Loss	DC-50	-	-	-	-	2.5	dB
Amplitude Flatness ₁	-	4	50	-	0.5	1.5	dB
Directivity	-	4	50	9	15	-	dB
VSWR	-	4	40	-	1.35	1.55	-
VSWR	-	40	50	-	1.55	-	-
Weight	-	-	-	-	35	-	g

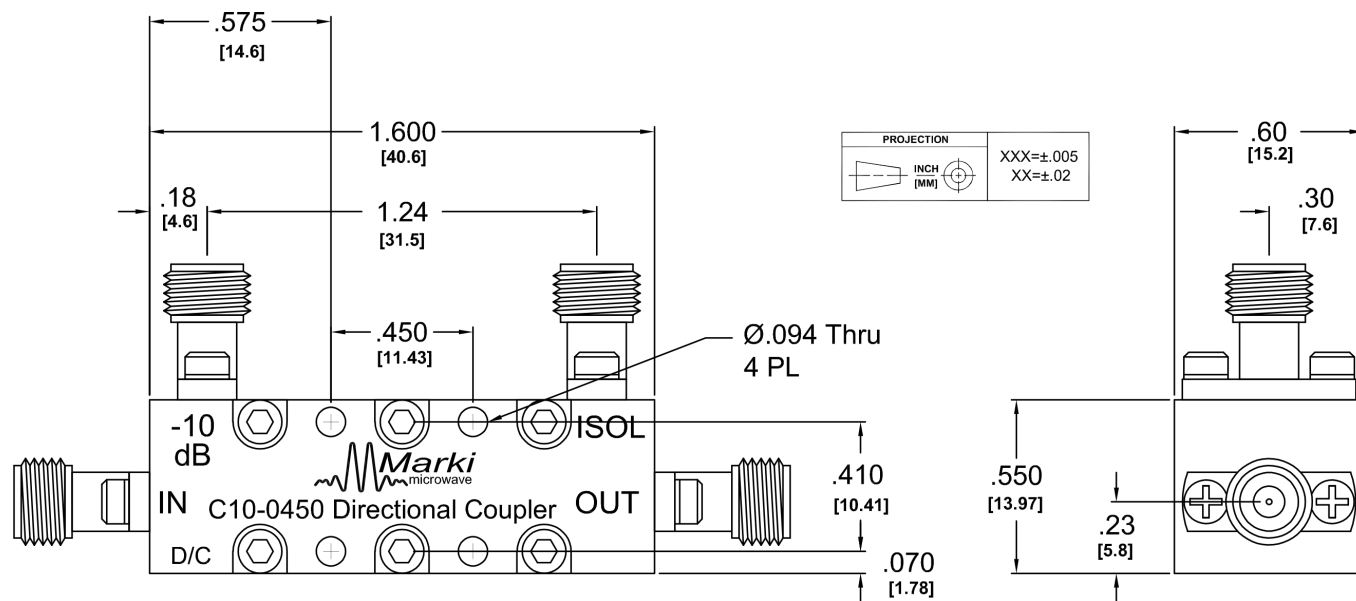
^[1] Deviation from average coupling.

Typical Performance Plots



Mechanical Data

Outline Drawing



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