Directional Coupler

ZCDC10-263+

Mini-Circuits 50 Ω 10 dB Up to 20 W 0.5 to 26.5 GHz SMA Female

KEY FEATURES

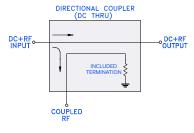
- Wide frequency range, 0.5 to 26.5 GHz
- Useable 9 kHz to 26.5 GHz
- Excellent coupling flatness, ±1.5 dB typ.
- Excellent directivity, 28 dB typ. up to 26.5 GHz
- Excellent return loss, 31 dB typ. up to 26.5 GHz
- Power handling up to 20 W
- DC current pass-through input to output

APPLICATIONS

- 5G
- Fixed satellite
- Radar
- Instrumentation
- Lab use

Generic photo used for illustration purposes only

FUNCTIONAL DIAGRAM



PRODUCT OVERVIEW

The Mini-Circuits' ZCDC10-263+ wideband directional coupler offers exceptional performance operating over 0.5 to 26.5 GHz. This coupler has excellent coupling flatness, good directivity, and power handling. It is ideal for lab testing applications as well as for power monitoring over wide bandwidths for many different applications.

ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Frequency (GHz)	Min.	Тур.	Max.	Units
Frequency Range	-	0.5	-	26.5	GHz
Mainline Loss ¹	0.5 - 18	-	1	1.8	dB
	18 - 26.5	-	1.5	2.2	
Coupling Nominal ²	0.5 - 26.5	-	10	-	dB
Coupling Flatness (±) ²	0.5 - 26.5	-	1.5	-	dB
Directivity	0.5 - 18	12	30	-	dB
	18 - 26.5	10	23	-	
Return Loss (Input & Output)	0.5 - 18	16	33	-	dB
	18 - 26.5	14	28	-	
Return Loss (Coupled)	0.5 - 18	16	33	-	-ID
	18 - 26.5	14	29	-	dB

1. Mainline loss includes coupling loss.

2. Coupling below rated frequency will vary.

ABSOLUTE MAXIMUM RATINGS³

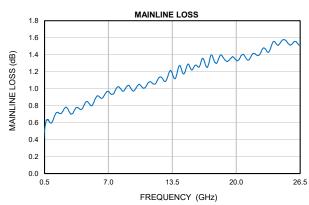
Operating Case Temperature	-55° C to +100° C	
Storage Temperature	-55° C to +100° C	
Input Power	20 W	
DC Current	0.5 A	

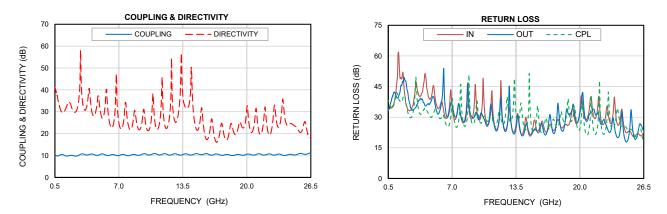
3. Permanent damage may occur if any of these limits are exceeded.



Up to 20 W 0.5 to 26.5 GHz SMA Female 50Ω 10 dB

TYPICAL PERFORMANCE GRAPHS





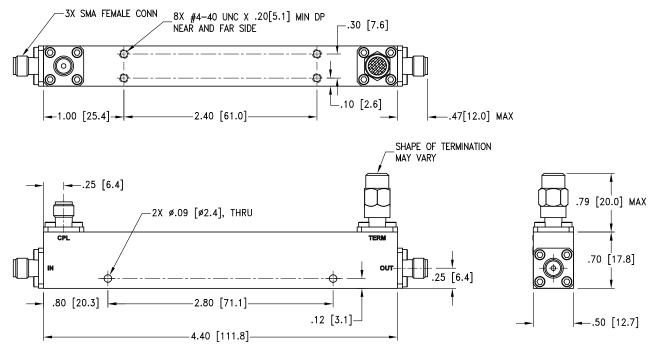


Up to 20 W 0.5 to 26.5 GHz SMA Female Mini-Circuits 50Ω 10 dB

COAXIAL CONNECTIONS

Ports	Marking
Input	IN
Output	OUT
Coupled	CPL
Termination (50Ω) Included	TERM

CASE STYLE DRAWING



Weight: 90 grams Dimensions are in inches [mm]. Tolerances: 2PI. ± .03; 3PI. ± .015 inches

PRODUCT MARKING*: ZCDC10-263+

*Marking may contain other features or characters for internal lot control.



10 dB Up to 20 W 0.5 to 26.5 GHz SMA Female Mini-Circuits 50Ω

ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD CLICK HERE

	Data	
Performance Data & Graphs	Graphs	
	S-Parameter (S3P Files) Data Set (.zip file)	
Case Style	HT2626-2	
Connectors	SMA Female	
RoHS Status	Compliant	
Environmental Ratings	ENV148	

NOTES

A. Performance and guality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.

B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.

The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights C. and benefits contained therein. For a full statement of the standard terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/terms/viewterm.html

