

DC Pass Directional Coupler

50Ω

800 to 1000 MHz

Maximum Ratings

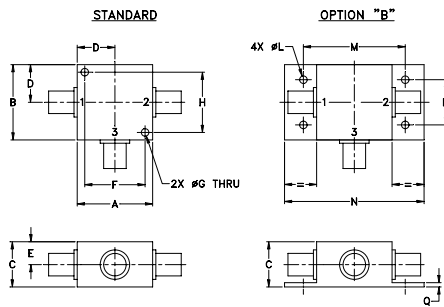
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
DC Current	1.0A

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

Coaxial Connections

INPUT	1
OUTPUT	2
COUPLED	3

Outline Drawing



Outline Dimensions (inch)

A	B	C	D	E	F	G	H
1.25	1.25	.75	.63	.38	1.00	.125	1.000
31.75	31.75	19.05	16.00	9.65	25.40	3.18	25.40
J	K	L	M	N	P	Q	wt
--	--	.125	1.688	2.18	.75	.07	grams
--	--	3.18	42.88	55.37	19.05	1.78	70.0

Features

- excellent mainline loss, 0.3 dB typ.
- high input power, 5 watts
- rugged shielded case
- DC current through input to output 1.0A Max.

Applications

- cellular
- instrumentation
- communications receivers & transmitters

ZFDC-15-10+
ZFDC-15-10



CASE STYLE: K18

Connectors	Model	Price	Qty.
SMA	ZFDC-15-10-S(+)	\$44.95	(1-9)

+ RoHS compliant in accordance
with EU Directive (2002/95/EC)

The +Suffix identifies RoHS Compliance. See our web site
for RoHS Compliance methodologies and qualifications.

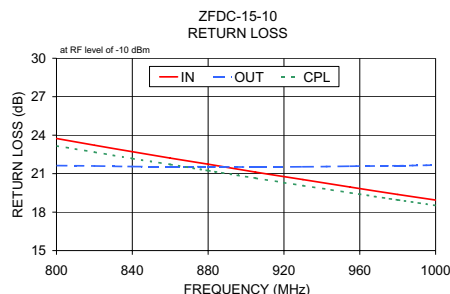
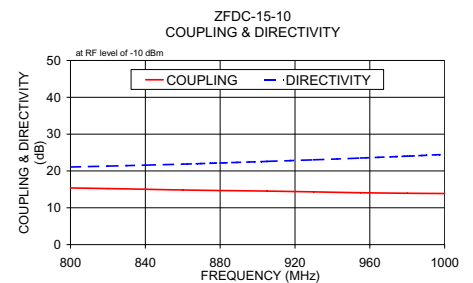
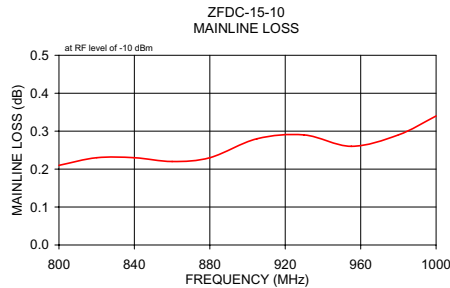
Directional Coupler Electrical Specifications

FREQ. RANGE (MHz)	COUPLING (dB)		MAINLINE LOSS ¹ (dB)		DIRECTIVITY (dB)		VSWR (:1)	POWER INPUT (W)
	Nom.	Flatness	Typ.	Max.	Typ.	Min.		
800-1000	15±1.0	±1.0	0.3	0.7	23	17	1.2	5.0

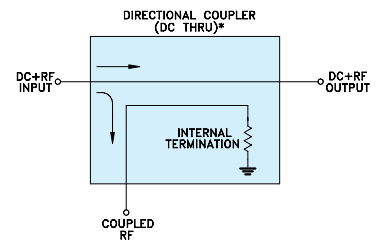
1. Mainline loss includes theoretical power loss at coupled port.

Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		
				In	Out	Cpl
800.00	0.21	15.38	21.07	23.74	21.63	23.17
820.00	0.23	15.21	21.32	23.22	21.60	22.68
840.00	0.23	15.03	21.58	22.71	21.56	22.18
860.00	0.22	14.84	21.86	22.21	21.55	21.72
880.00	0.23	14.69	22.18	21.74	21.54	21.24
905.00	0.28	14.53	22.61	21.12	21.52	20.65
930.00	0.29	14.33	23.03	20.54	21.54	20.07
955.00	0.26	14.10	23.52	19.95	21.58	19.51
980.00	0.29	13.95	24.03	19.38	21.62	18.95
1000.00	0.34	13.87	24.51	18.94	21.67	18.52



Electrical Schematic



* ELECTRICAL SCHEMATIC FOR DIRECTIONAL COUPLER THAT
IS DESIGNED WITHOUT INTERNAL TRANSFORMERS.

For detailed performance specs
& shipping online see web site

Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED
IF/RF MICROWAVE COMPONENTS

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights 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/MCLStore/terms.jsp.

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