

# Coaxial Directional Coupler

50Ω 18dB 800 to 2000 MHz

## ZNDC-18-2G+ ZNDC-18-2G



### Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power input	3W Max.

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

### Coaxial Connections

INPUT	1
OUTPUT	2
COUPLED	3

### Features

- excellent mainline loss, 0.5 dB typ.
- excellent VSWR, 1.15:1 typ.
- very flat coupling  $\pm 0.3$  dB typ.

### Applications

- cellular
- PCS
- ISM

CASE STYLE: FM587

Connectors	Model	Price	Qty.
SMA	ZNDC-18-2G-S(+)	\$49.95	(1-9)

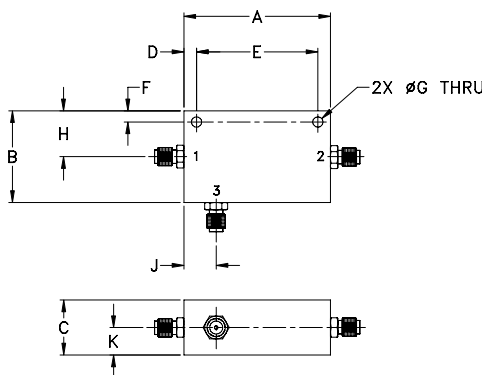
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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 (dB)		DIRECTIVITY (dB)		VSWR (:1)	POWER INPUT (W)
	Nom.	Max. Flatness	Typ.	Max.	Typ.	Min.		
800-2000								
800-1000	18.5 $\pm$ 0.5	$\pm$ 0.3	0.3	0.6	22	17	1.1	3
1000-1700	18.2 $\pm$ 0.5	$\pm$ 0.4	0.5	0.9	22	18	1.2	3
1700-2000	18.0 $\pm$ 0.5	$\pm$ 0.35	0.6	1.1	25	14	1.3	3

### Outline Drawing

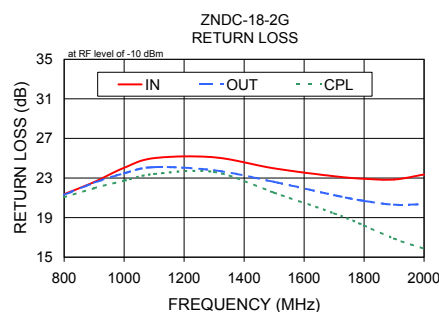
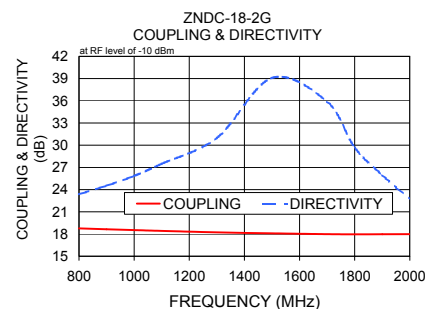
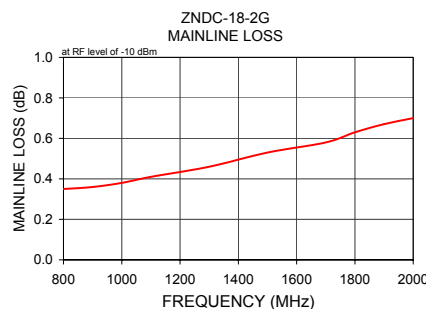


### Outline Dimensions (inch/mm)

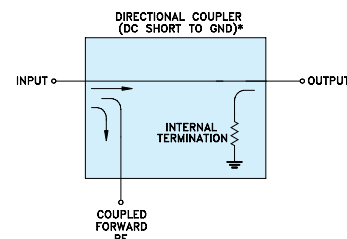
A	B	C	D	E	F	
2.00	1.25	0.75	0.17	1.656	0.15	
50.80	31.75	19.05	4.32	42.06	3.81	
G	H	J	K			wt
0.14	0.63	0.44	0.38			grams
3.56	16.00	11.18	9.65			57.0

### Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		
				In	Out	Cpl
800.00	0.35	18.76	23.37	21.37	21.29	21.05
900.00	0.36	18.64	24.53	22.59	22.52	21.97
1000.00	0.38	18.53	25.86	24.03	23.48	22.73
1100.00	0.41	18.42	27.49	25.01	24.10	23.40
1300.00	0.46	18.23	30.98	25.09	23.78	23.61
1500.00	0.53	18.09	39.09	23.97	22.61	21.52
1700.00	0.58	17.98	35.88	23.18	21.27	19.43
1800.00	0.63	17.96	29.68	22.92	20.69	18.20
1900.00	0.67	17.97	25.97	22.85	20.31	16.89
2000.00	0.70	17.98	22.69	23.35	20.36	15.85



### Electrical Schematic



\* ELECTRICAL SCHEMATIC IS FOR DIRECTIONAL COUPLER WITH INTERNAL TRANSFORMER(S) THAT ROUTES DC FROM RF PORTS TO GROUND.

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](http://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](http://www.minicircuits.com/MCLStore/terms.jsp).

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