

Directional Coupler

50Ω 20dB 800 to 2000 MHz

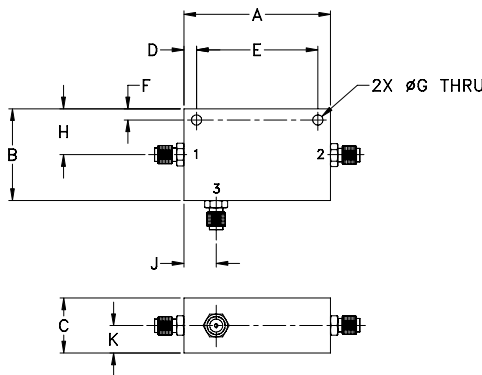
Maximum Ratings

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

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	

Features

- excellent mainline loss, 0.5 dB typ.
- excellent VSWR, 1.15:1 typ.
- very flat coupling ± 0.2 dB typ.

Applications

- cellular
- PCS
- ISM

ZNDC-20-2G+



CASE STYLE: FM587

Connectors	Model	Price	Qty.
SMA	ZNDC-20-2G-S+	\$49.95	(1-9)

+RoHS Compliant

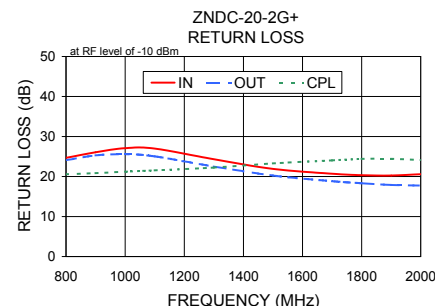
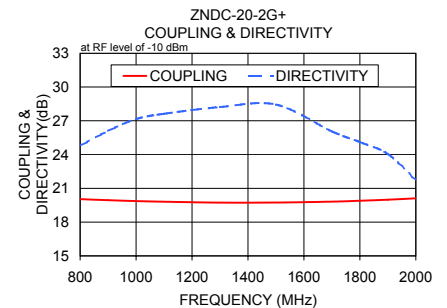
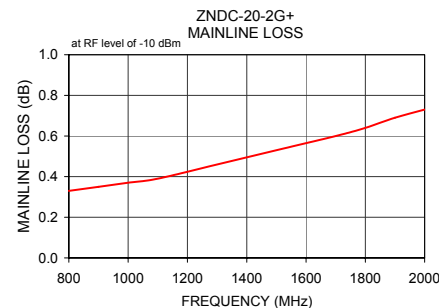
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Directional Coupler Electrical Specifications

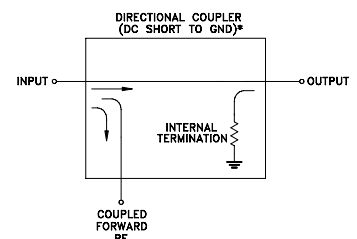
FREQ. RANGE (MHz)	COUPLING (dB)		MAINLINE LOSS (dB)		DIRECTIVITY (dB)		VSWR (:1)	POWER INPUT (W)
	Nom.	Max. Flatness	Typ.	Max.	Typ.	Min.		
800-2000								
800-1000	20.0 $\pm$ 0.5	$\pm$ 0.3	0.35	0.6	25	17	1.15	3
1000-1700	19.8 $\pm$ 0.5	$\pm$ 0.4	0.5	0.9	25	18	1.15	3
1700-2000	19.8 $\pm$ 0.5	$\pm$ 0.5	0.6	1.1	20	14	1.15	3

Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		
				In	Out	Cpl
800.00	0.33	20.04	24.78	24.68	24.07	20.57
900.00	0.35	19.95	26.10	26.07	25.28	20.84
1000.00	0.37	19.87	27.15	27.09	25.57	21.21
1100.00	0.39	19.81	27.62	26.98	25.04	21.54
1300.00	0.46	19.73	28.22	24.33	22.51	22.23
1500.00	0.53	19.74	28.44	21.90	20.25	23.28
1700.00	0.60	19.82	26.05	20.70	18.83	24.03
1800.00	0.64	19.90	25.11	20.34	18.32	24.40
1900.00	0.69	19.99	24.05	20.25	17.90	24.43
2000.00	0.73	20.11	21.74	20.57	17.76	24.12



Electrical Schematic



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

Notes

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