

Coaxial Directional Coupler

50Ω 5 to 2000 MHz

ZX30-17-5+ ZX30-17-5



CASE STYLE: FL905

Connectors	Model	Price	Qty.
SMA	ZX30-17-5-S(+)	\$29.95 ea.	(1-24)

+ 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.

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C

Coaxial Connections

INPUT	1
OUTPUT	2
COUPLED	3

Features

- very flat coupling
- very broad, multi-octave
- all welded construction
- protected by U.S Patents 6,140,887 & 6,784,521 & 6,790,049

Applications

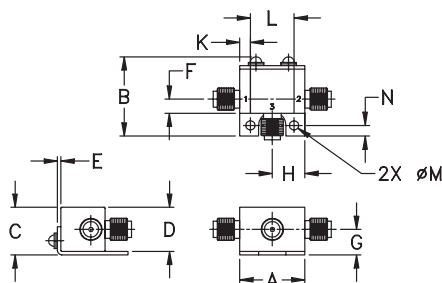
- cable tv
- instrumentation
- communications receivers & transmitters
- GPS

Directional Coupler Electrical Specifications (T_{AMB} = 25°C)

FREQ. (MHz)	COUPLING (dB)		MAINLINE LOSS ¹ (dB)		DIRECTIVITY (dB)		VSWR (:1)	POWER INPUT, W	
	Nom.	Typ. Flatness	Typ.	Max.	Typ.	Min.		Typ.	Max.
f _L -f _U									
5-1000	16.8±0.7	±0.4	0.7	1.1	16	14	1.30	0.5	1.0
1000-1500	17.5±0.9	±0.4	0.85	1.4	18	12	1.30	0.5	1.0
1500-2000	18.5±1.0	±0.3	1.1	1.7	14	-	1.30	0.5	1.0

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

Outline Drawing

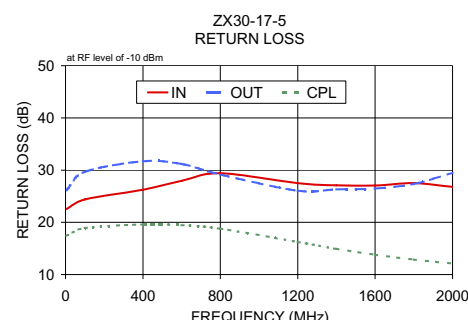
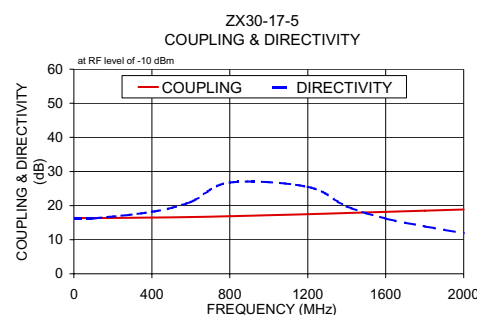
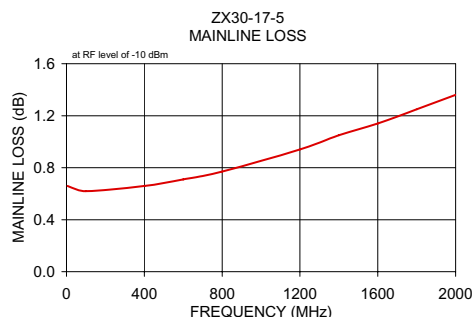


Outline Dimensions (inch/mm)

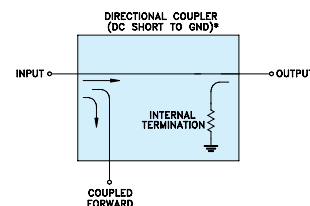
A	B	C	D	E	F	G
.74	.90	.54	.50	.04	.16	.29
18.80	22.86	13.72	12.70	1.02	4.06	7.37
H	J	K	L	M	N	wt
.37	--	.122	.496	.106	.122	grams
9.40	--	3.10	12.60	2.69	3.10	20.0

Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		
				In	Out	Cpl
5.00	0.66	16.40	16.11	22.56	26.16	17.43
100.00	0.62	16.33	16.24	24.38	29.66	18.91
400.00	0.66	16.48	18.15	26.25	31.68	19.58
600.00	0.71	16.64	21.05	27.95	31.19	19.46
800.00	0.77	16.87	26.80	29.39	29.15	18.78
1200.00	0.94	17.49	25.48	27.49	26.06	16.25
1400.00	1.05	17.83	19.73	27.10	26.30	14.93
1600.00	1.14	18.17	16.19	27.06	26.48	13.79
1800.00	1.25	18.51	13.87	27.50	27.35	12.86
2000.00	1.36	18.83	11.92	26.79	29.50	12.12



Electrical Schematic



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

Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED

minicircuits.com

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site

The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

IF/RF MICROWAVE COMPONENTS

REV. G
M119986
ED-10213A/3
ZX30-17-5
WZ/TD/CP/AM
081112