

Coaxial Directional Coupler

50Ω 5 to 2000 MHz

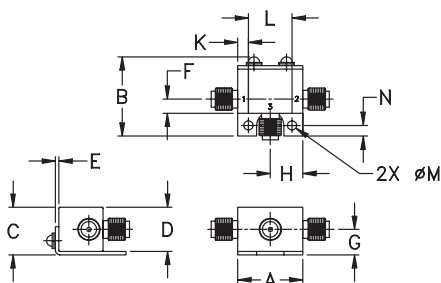
Maximum Ratings

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

Coaxial Connections

INPUT	1
OUTPUT	2
COUPLED	3

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

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

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.

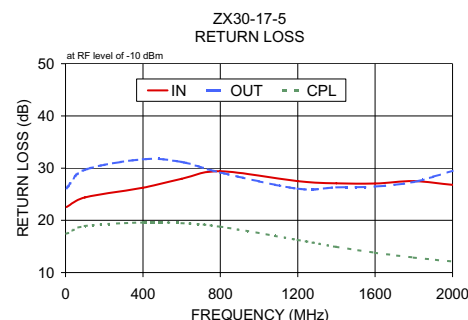
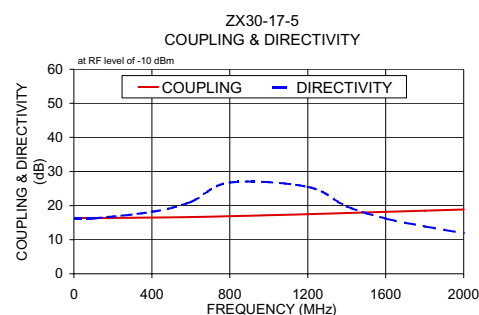
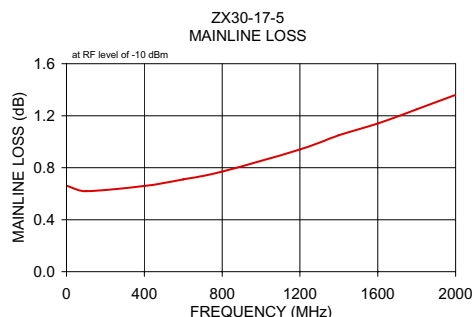
Directional Coupler Electrical Specifications (T_{AMB} = 25°C)

FREQ. (MHz)	COUPLING (dB)		MAINLINE LOSS ¹ (dB)		DIRECTIVITY (dB)		VSWR (:1)	POWER INPUT, W	
	Nom.	Typ. Flatness	Typ.	Max.	Typ.	Min.		L	MU
f _L -f _U							Typ.	Max.	Max.
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

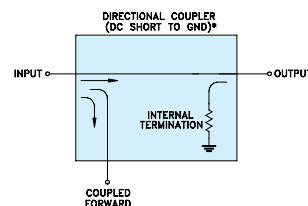
1. Mainline loss includes theoretical power loss at coupled port.

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.

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