

Coaxial

Directional Coupler

NEW!

ZX30-17-5

50Ω

5 to 2000 MHz

Maximum Ratings

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

Coaxial Connections

PORT	db
INPUT	1
OUTPUT	2
COUPLED	3

Features

- very flat coupling
- very broad, multi-octave
- all welded construction
- protected by U.S. Patent 6140887 & 6784531

Applications

- cable tv
- instrumentation
- communication receivers & transmitters
- gps



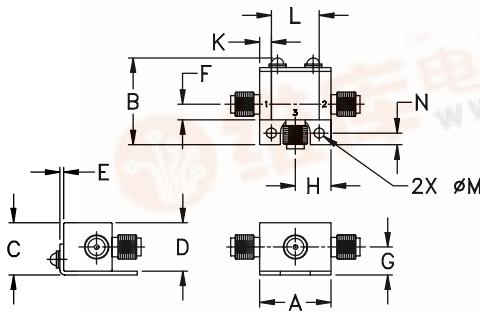
CASE STYLE: FL905
CONNECTORS: SMA
PRICE: \$29.95 ea. QTY (1-24)

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

FREQ. RANGE (MHz)	COUPLING (dB)		MAINLINE LOSS ¹ (dB)			DIRECTIVITY (dB)			VSWR (:1)	POWER INPUT, W	
	Nom.	Typ. Flatness	L Typ.	M Typ.	U Typ.	L Typ. Min.	M Typ. Min.	U Typ. Min.		L Max.	MU 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

L = low range [f_l to 10 f_l] M = mid range [10 f_l to f_u/2] U = upper range [f_u/2 to f_u]
1. Mainline loss includes theoretical power loss at coupled port.

Outline Drawing



Outline Dimensions (inch/mm)

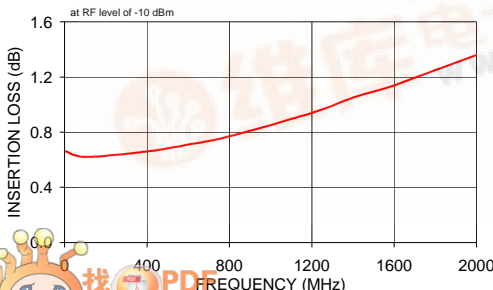
A	B	C	D	E	F	G
.74	.90	.54	.50	.04	.16	.29
18.80	22.86	13.72	12.70	1.02	4.06	7.37

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

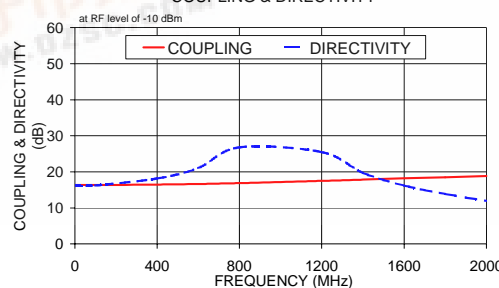
Typical Performance Data

Frequency (MHz)	Insertion 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

ZX30-17-5 INSERTION LOSS



ZX30-17-5 COUPLING & DIRECTIVITY



ZX30-17-5 RETURN LOSS

