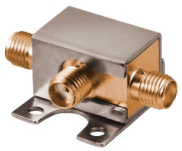
Coaxial

Directional Coupler

50Ω 5 to 1200 MHz

ZX30-13-4+
ZX30-13-4



CASE STYLE: FL905

Connectors	Model	Price	Qty.
SMA	ZX30-13-4-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

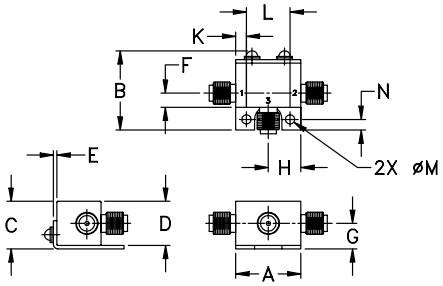
Features

- 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

- VHF/UHF
- communications receivers & transmitters
- cellular
- instrumentation

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

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

FREQ. (MHz)	COUPLING (dB)		MAINLINE LOSS[1] (dB)						DIRECTIVITY (dB)						VSWR (:1)	POWER INPUT, W	
		Typ.	L		M		U		L		M		U			L	MU
f_L-f_U	Nom.	Flatness	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Max.
5-1200	13.0±0.5	±0.3	06	0.9	0.7	1.1	0.9	1.5	21	18	19	15	15	10	1.15	0.5	1.0

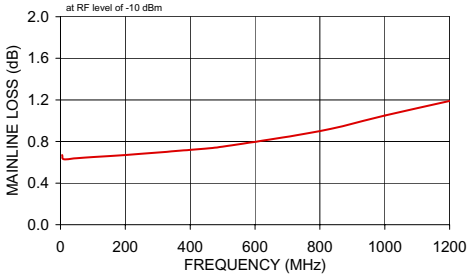
L = low range [f_L to 10 f_L] M = mid range [10 f_L to f_U/2] U= upper range [f_U/2 to f_U]

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

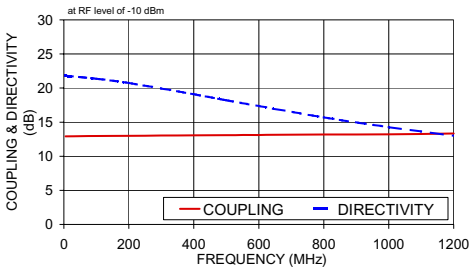
Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB) In	Return Loss (dB) Out	Return Loss (dB) Cpl
5.00	0.67	12.93	21.86	22.28	30.20	24.37
10.00	0.63	12.92	21.79	22.90	33.04	24.96
50.00	0.64	12.94	21.62	23.33	35.18	25.41
100.00	0.65	12.97	21.36	23.44	34.61	25.60
200.00	0.67	13.00	20.75	23.69	32.95	25.93
400.00	0.72	13.06	19.10	24.38	30.15	26.19
500.00	0.75	13.10	18.21	24.74	29.05	25.88
800.00	0.90	13.20	15.71	24.52	27.13	24.26
1000.00	1.05	13.22	14.27	23.46	26.43	23.13
1200.00	1.19	13.34	12.99	21.92	25.81	22.53

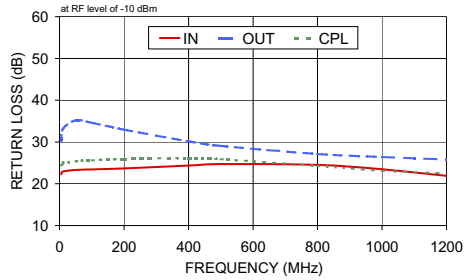
ZX30-13-4
MAINLINE LOSS



ZX30-13-4
COUPLING & DIRECTIVITY



ZX30-13-4
RETURN LOSS



electrical schematic