

Coaxial Directional Coupler

ZEDC-15-2B

50Ω

1 to 1000 MHz



Maximum Ratings

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

Coaxial Connections

INPUT	1
OUTPUT	2
COUPLED	3

Features

- wideband, 1 to 1000 MHz
- excellent insertion loss, 0.8 dB typ.
- excellent directivity, 30 dB typ.
- rugged shielded case

CASE STYLE: V37

Connectors	Model	Price	Qty.
SMA	ZEDC-15-2B-S	\$64.95 ea.	(1-9)

Applications

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

Directional Coupler Electrical Specifications

FREQ. RANGE (MHz)	COUPLING (dB)		MAINLINE LOSS ¹						DIRECTIVITY (dB)						VSWR (:1)	POWER INPUT (W)	
			L		M		U		L		M		U				
	Nom.	Flatness	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Max.
1-1000	15±0.5	±0.5	0.5	1.4	0.8	1.2	1.0	1.4	35	30	30	20	25	15	1.15	1.5	3.0

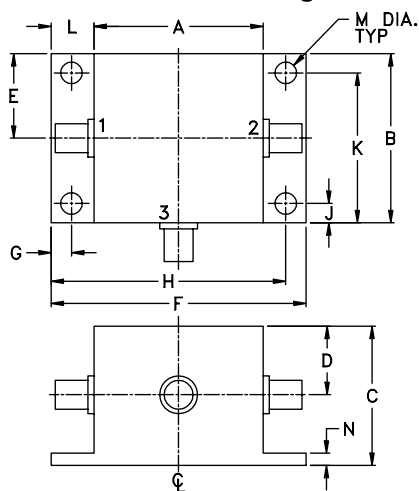
L = low range [f_L to $10 f_L$] M = mid range [$10 f_L$ to $f_U/2$] U = upper range [$f_U/2$ to f_U]

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)		Cpl
				In	Out	
1.00	0.89	14.88	79.23	20.86	18.52	18.59
5.00	0.62	14.60	77.98	28.31	22.92	22.83
9.00	0.60	14.58	75.18	30.07	23.46	23.42
96.00	0.68	14.64	47.38	28.75	22.70	22.81
248.00	0.72	14.68	36.05	27.13	22.32	22.74
420.00	0.79	14.71	29.08	25.36	21.07	22.68
520.00	0.84	14.73	26.18	24.45	19.92	22.58
640.00	0.91	14.73	23.49	23.56	18.30	22.45
840.00	1.06	14.76	20.21	22.53	15.42	22.17
1000.00	1.15	14.70	18.59	22.05	13.20	21.93

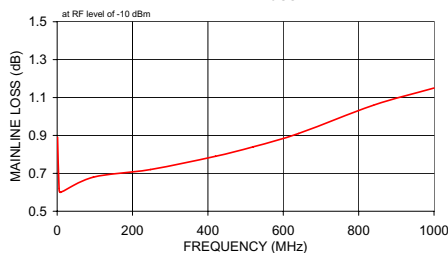
Outline Drawing



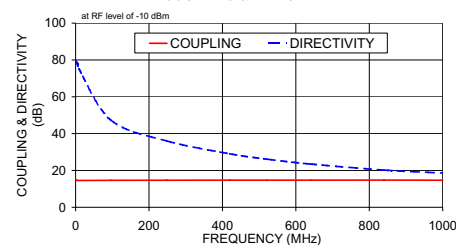
Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.83	.83	.75	.37	.42	1.25	.100
21.08	21.08	19.05	9.40	10.67	31.75	2.54
H	J	K	L	M	N	wt
1.150	.095	.735	.21	.106	.06	grams
29.21	2.41	18.67	5.33	2.69	1.52	34

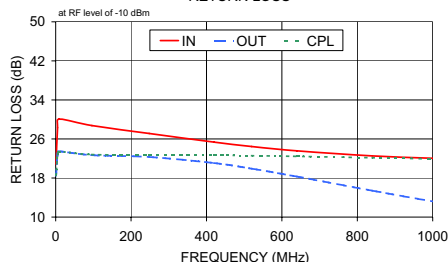
ZEDC-15-2B MAINLINE LOSS



ZEDC-15-2B COUPLING & DIRECTIVITY



ZEDC-15-2B RETURN LOSS



electrical schematic

