

# 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 mainline loss, 0.8 dB typ.
- excellent directivity, 30 dB typ.
- rugged shielded case

### Applications

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

CASE STYLE: V37

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

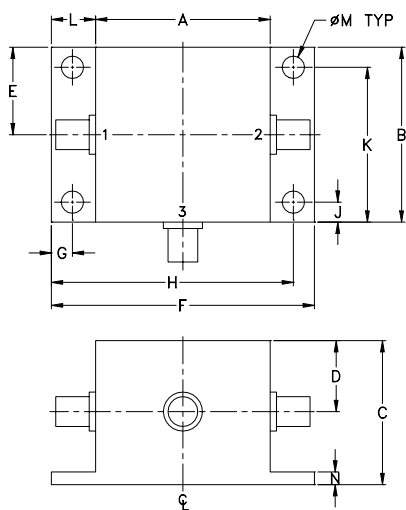
### Directional Coupler Electrical Specifications

FREQ. RANGE (MHz)	COUPLING (dB)		MAINLINE LOSS <sup>1</sup> (dB)						DIRECTIVITY (dB)						VSWR (:1)	POWER INPUT (W)		
	Nom.	Flatness	L		M		U		L		M		U			Typ.	L	MU
			Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.				
f <sub>L</sub> -f <sub>U</sub>	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<sub>L</sub> to 10 f<sub>L</sub>] M = mid range [10 f<sub>L</sub> to f<sub>U</sub>/2] U = upper range [f<sub>U</sub>/2 to f<sub>U</sub>]

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

### Outline Drawing



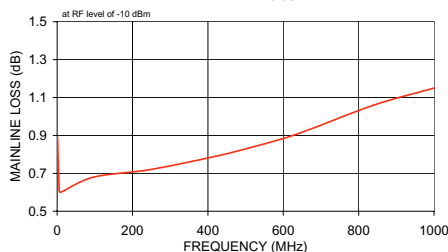
### Outline Dimensions (inch/mm)

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	22.0

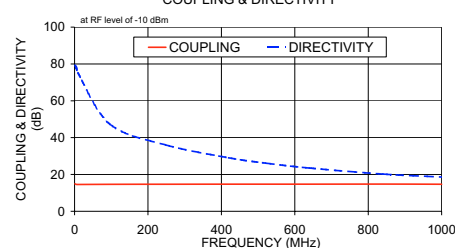
### Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		
				In	Out	Cpl
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

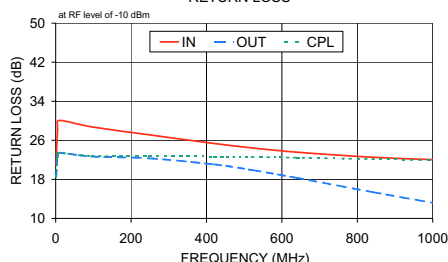
ZEDC-15-2B MAINLINE LOSS



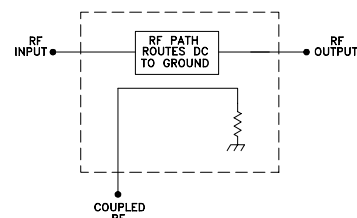
ZEDC-15-2B COUPLING & DIRECTIVITY



ZEDC-15-2B RETURN LOSS



### electrical schematic



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