

Coaxial Directional Coupler

ZEDC-10-2B

50Ω

1 to 1000 MHz



Generic photo used for illustration purposes only
CASE STYLE: V37

Maximum Ratings

Operating Temperature -55°C to 100°C

Storage Temperature -55°C to 100°C

Permanent damage may occur if any of these limits are exceeded.

Coaxial Connections

INPUT	1
OUTPUT	2
COUPLED	3

Features

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

Connectors Model
SMA ZEDC-10-2B

Applications

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

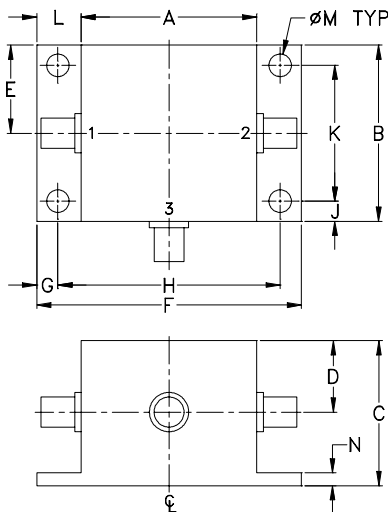
Directional Coupler Electrical Specifications

FREQ. (MHz)	COUPLING (dB)		MAINLINE LOSS ¹ (dB)						DIRECTIVITY (dB)						POWER INPUT (W)	
	Nom.	Flat-ness	L		M		U		L		M		U		L	MU
f_L - f_U			Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Max.	Max.
1-1000	11±0.5	±0.75	1.3	1.9	1.5	1.8	1.5	1.8	35	30	30	20	18	13	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. Loss will be go up to 2.5 dB @-55°C

Outline Drawing

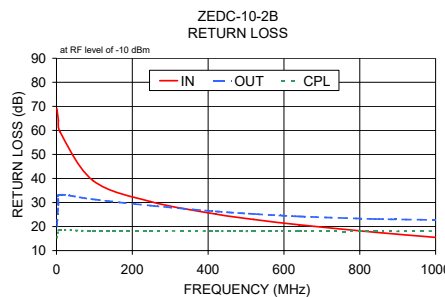
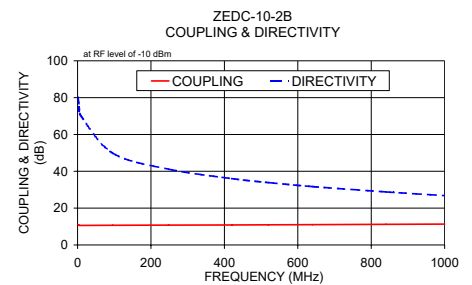
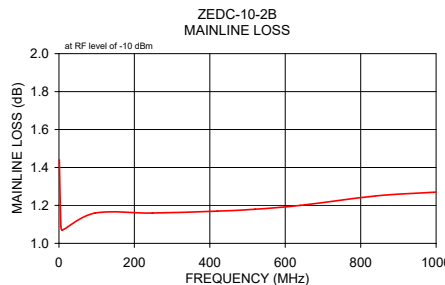


Outline Dimensions (inch / mm)

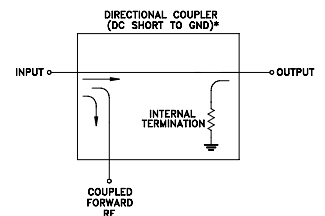
A	B	C	D	E	F	G
.83	.83	.75	.37	.42	1.25	.10
21.08	21.08	19.05	9.40	10.67	31.75	2.54
H	J	K	L	M	N	wt
1.050	.10	.640	.21	.106	.06	grams
26.67	2.54	16.26	5.33	2.69	1.52	22.0

Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)			Return Loss (dB)	
			In	Out	Cpl		
1.00	1.44	11.03	80.15	69.12	20.04	15.32	
5.00	1.09	10.64	74.80	64.16	29.77	18.35	
9.00	1.07	10.62	70.11	59.49	33.22	18.65	
96.00	1.16	10.69	49.83	39.14	31.36	18.19	
248.00	1.16	10.76	41.15	30.39	28.72	18.19	
420.00	1.17	10.84	36.04	25.20	26.31	18.12	
520.00	1.18	10.92	33.89	22.97	25.24	18.03	
640.00	1.20	11.01	31.72	20.71	24.23	17.96	
840.00	1.25	11.21	28.83	17.62	23.14	17.96	
1000.00	1.27	11.32	26.81	15.49	22.76	18.15	



Electrical Schematic



* ELECTRICAL SCHEMATIC IS FOR DIRECTIONAL COUPLER WITH INTERNAL TRANSFORMERS THAT ROUTES DC FROM RF PORTS TO GROUND.

Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
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