

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

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 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
SMA ZEDC-15-2B

Directional Coupler Electrical Specifications

FREQ. RANGE (MHz)	COUPLING (dB)		MAINLINE LOSS ¹ (dB)				DIRECTIVITY (dB)			VSWR (:1)	POWER INPUT (W)					
	Nom.	Flatness	L		M		U				L	MU				
f _L -f _U			Typ.	Max.	Typ.	Max.	Typ.	Max.	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	1.5	3.0

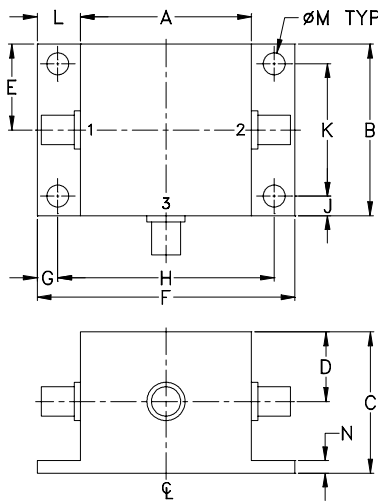
L = low range [f_L to 10 f_L] M = mid range [10 f_L to f_U/2] U = upper range [f_U/2 to f_U]

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

Typical Performance Data

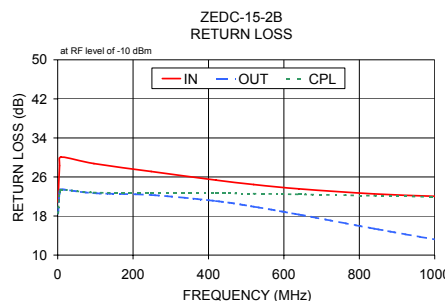
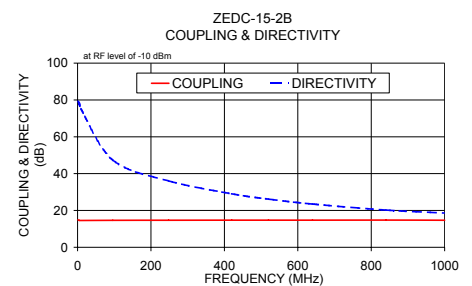
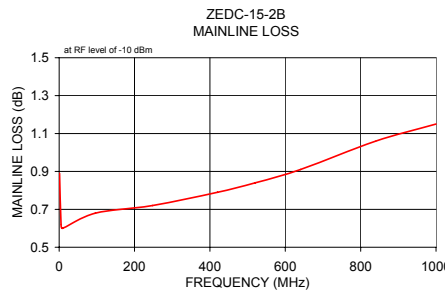
Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		Cpl
				In	Out	
1.00	0.89	14.88	79.23	20.86	18.52	18.59
5.00	0.62	14.60	77.98	28.31	22.92	22.83
9.00	0.60	14.58	75.18	30.07	23.46	23.42
96.00	0.68	14.64	47.38	28.75	22.70	22.81
248.00	0.72	14.68	36.05	27.13	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

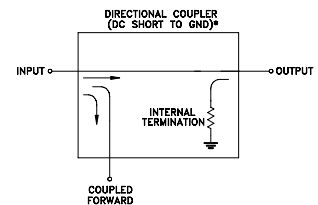


Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.83	.83	.75	.37	.42	1.25	.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



Electrical Schematic



* ELECTRICAL SCHEMATIC IS FOR DIRECTIONAL COUPLER WITH INTERNAL TRANSFORMER(S) 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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