

Coaxial Directional Coupler

50Ω

1 to 1000 MHz

ZEDC-10-2B

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

Applications

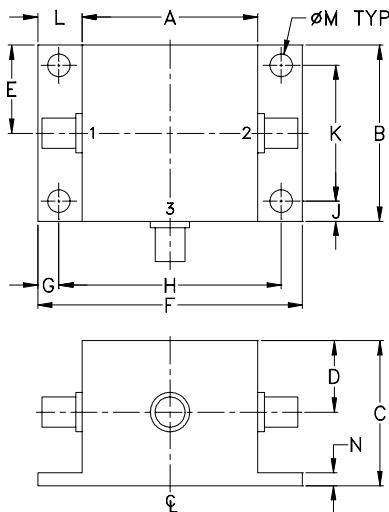
- VHF/UHF
- instrumentation
- communication receivers & transmitters
- cellular



CASE STYLE: V37

Connectors	Model
SMA	ZEDC-10-2B

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

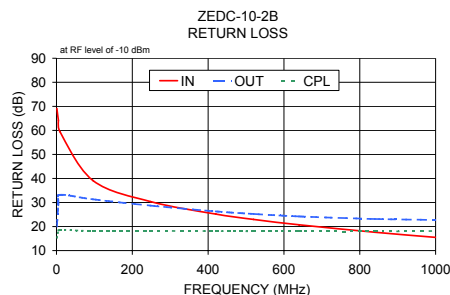
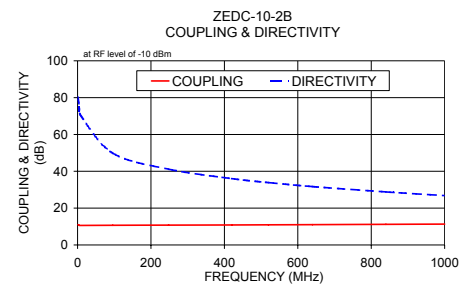
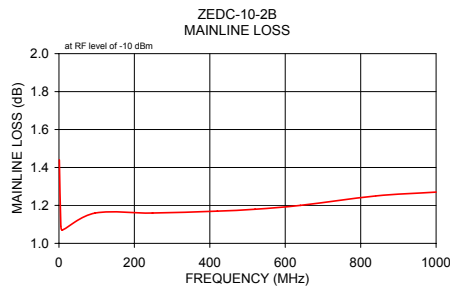
Directional Coupler Electrical Specifications

FREQ. RANGE (MHz)	COUPLING (dB)		MAINLINE LOSS¹ (dB)						DIRECTIVITY (dB)						VSWR (:1)	POWER INPUT (W)	
			L		M		U		L		M		U				
	f _L -f _U	Nom.	Flatness	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.
1-1000	11±0.5	±0.75	1.3	1.8	1.5	1.8	1.5	1.8	35	30	30	20	18	13	1.3	1.5	3.0

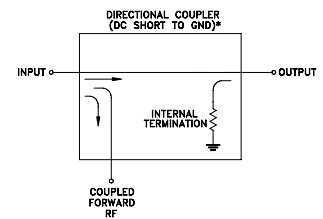
L = low range [f_L to $10 f_L$] M = mid range [$10 f_L$ to $f_U/2$] U = upper range [$f_U/2$ to f_U]
1. Mainline loss includes theoretical power loss at coupled port.

Typical Performance Data

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



Notes

- A. 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.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp



www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

REV. B
M151107
ZEDC-10-2B
WZ/TD/CP/AM
151007
Page 1 of 1