DC Pass
Bi-Directional Coupler

ZABDC20-25H75+

75Ω Up to 100W 700 to 2500 MHz



CASE STYLE: DD477-1

Connectors	Model
N-TYPE	ZABDC20-25H75+

+RoHS Compliant
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Maximum Ratings

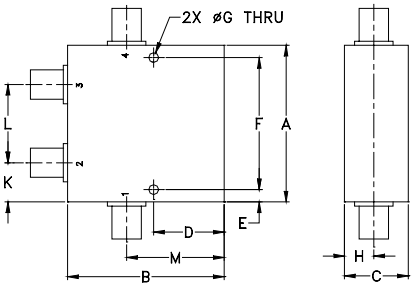
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
DC Current	2.0 A

* Case temperature is defined as temperature on ground leads. Permanent damage may occur if any of these limits are exceeded.

Coaxial Connections

INPUT	1
OUTPUT	4
COUPLED (forward)	2
COUPLED (reverse)	3

Outline Drawing



Outline Dimensions (inch / mm)

A	B	C	D	E	F	G
2.00	2.00	.88	.90	.156	1.688	.125
50.80	50.80	22.35	22.86	3.96	42.88	3.18

H	J	K	L	M		wt
.38	---	.50	1.00	1.25		grams
9.65	---	12.70	25.40	31.75		225

Features

- excellent mainline loss, 0.15 dB typ.
- excellent directivity, 25 dB typ.
- high power, up to 100W
- rugged shielded case
- DC current through input to output 2.0A Max. at 50 watt RF input power

Applications

- cable tv
- power leveling & monitoring
- VSWR measurement

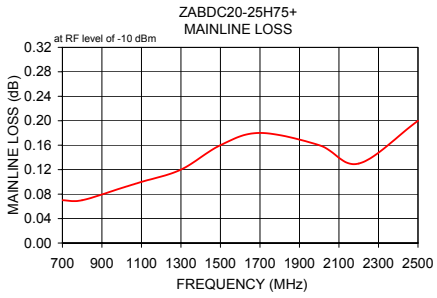
Bi-Directional Coupler Electrical Specifications

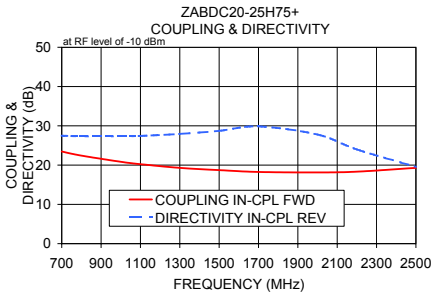
FREQ. (MHz)	COUPLING (dB)		MAINLINE LOSS[1] (dB)		DIRECTIVITY (dB)		VSWR (:1)	POWER INPUT (W)
f_L-f_U	Nom.	Flatness	Typ.	Max.	Typ.	Min.	Typ.	Max.
700-2500			**0.15**	**0.35**	**25**	**15**	**1.08**	**25**
800-1000	21.5±1.0	±0.95	0.10	0.30	27	22	1.08	100
1000-1300	20±0.8	±0.95	0.15	0.35	27	20	1.08	50
1300-2200	18.5±1.0	±0.7	0.15	0.35	25	17	1.08	50
2200-2500	18.5±1.0	±0.7	0.15	0.35	18	15	1.08	25

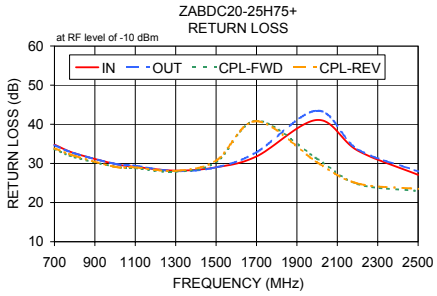
1. Mainline loss includes theoretical power loss at coupled port.

Typical Performance Data

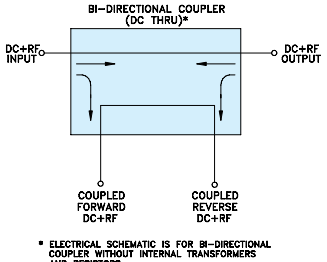
Frequency (MHz)	Mainline Loss (dB)	Coupling (dB)		Directivity (dB)		Return Loss (dB)			
	In-Out	In-Cpl Fwd	Out-Cpl Rev	Out-Cpl Fwd	In-Cpl Rev	In	Out	Cpl Fwd	Cpl Rev
700.00	0.07	23.45	23.45	27.55	27.50	34.81	34.65	33.64	33.85
800.00	0.07	22.41	22.41	27.34	27.33	32.60	32.55	31.58	31.93
1000.00	0.09	20.85	20.86	26.91	27.33	29.85	29.89	29.17	29.13
1100.00	0.10	20.24	20.25	26.77	27.44	29.14	29.39	28.78	28.99
1300.00	0.12	19.29	19.29	26.66	27.95	28.17	28.04	27.88	28.11
1500.00	0.16	18.72	18.71	26.90	28.73	29.02	29.00	30.31	30.70
1700.00	0.18	18.26	18.24	27.53	29.85	31.79	32.85	40.91	40.80
2000.00	0.16	18.13	18.11	26.08	27.79	41.10	43.50	31.19	30.29
2200.00	0.13	18.33	18.32	22.74	23.99	33.31	33.65	24.74	24.89
2500.00	0.20	19.29	19.29	18.56	19.52	27.08	27.97	22.95	23.50







Electrical Schematic



Notes
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