DC Pass

Bi-Directional Coupler

ZABDC10-25HP

50Ω Up to 10W 1500 to 2500 MHz

CASE STYLE: DD477

Connectors	Model	Price	Qty.
SMA	ZABDC10-25HP-S	$89.95 ea.	(1-9)

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
DC Current	3.0A

* 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

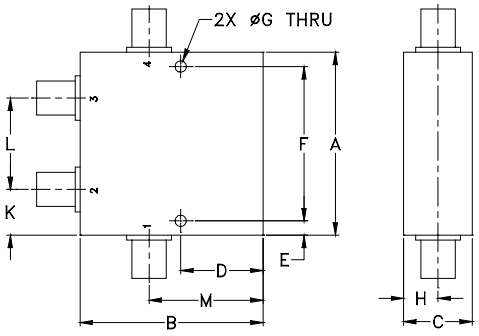
Features

- excellent directivity, 26 dB typ.
- low mainline loss, 0.55 dB typ.
- high power, up to 10W
- rugged shielded case
- DC Current through input to ouput 3.0A Max. at 1.0 Watt RF input power.

Applications

- PCS/DCS/UMTS
- power leveling & monitoring
- VSWR measurement

Outline Drawing



Outline Dimensions (inch / mm)

A	B	C	D	E	F	G
2.00	2.00	.75	.90	.156	1.688	.125
50.80	50.80	19.05	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	145

Bi-Directional Coupler Electrical Specifications

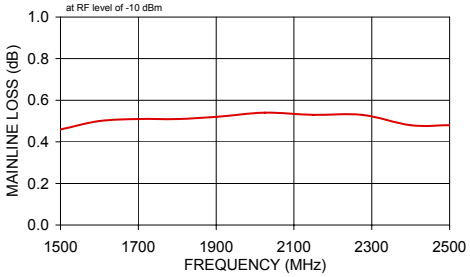
FREQ. RANGE (MHz)	COUPLING (dB)		MAINLINE LOSS[1] (dB)		DIRECTIVITY (dB)		VSWR (:1)	POWER INPUT (W)
f_L-f_U	Nom.	Flatness	Typ.	Max.	Typ.	Min.	Typ.	Max.
1500-2500	10.0±1.0	±0.5	0.55	0.9	26	18	1.1	10

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

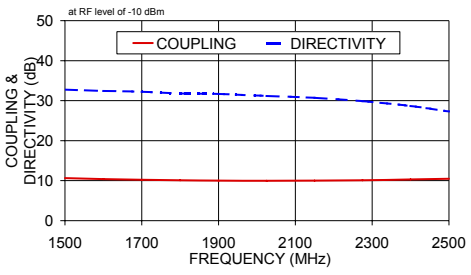
Typical Performance Data

Frequency (MHz)	Mainline Loss (dB)	Coupling (dB)	Directivity (dB)	Return Loss (dB)		
	In-Out	In-Cpl		In	Out	Cpl
1500.00	0.46	10.63	32.78	35.66	32.94	29.14
1600.00	0.50	10.40	32.41	36.80	32.04	29.28
1700.00	0.51	10.22	32.23	38.86	31.39	29.14
1800.00	0.51	10.10	31.80	41.30	30.68	28.63
1900.00	0.52	10.02	31.67	40.85	29.79	27.81
2025.00	0.54	9.97	31.18	35.57	28.38	26.47
2150.00	0.53	10.01	30.70	31.10	26.78	24.97
2275.00	0.53	10.12	29.90	27.82	25.17	23.39
2400.00	0.48	10.30	28.68	25.32	23.70	21.69
2500.00	0.48	10.49	27.31	23.74	22.69	20.27

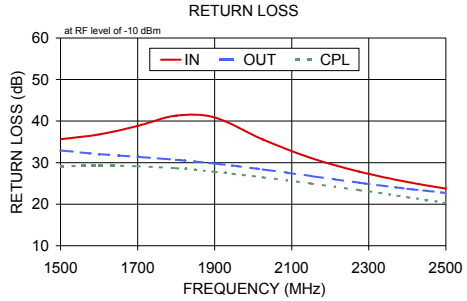
ZABDC10-25HP
MAINLINE LOSS



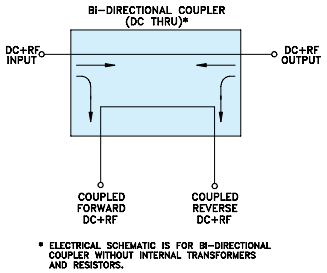
ZABDC10-25HP
COUPLING & DIRECTIVITY



ZABDC10-25HP
RETURN LOSS



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.
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