

DC Pass

Bi-Directional Coupler

50Ω Up to 10W 1500 to 2400 MHz

Maximum Ratings

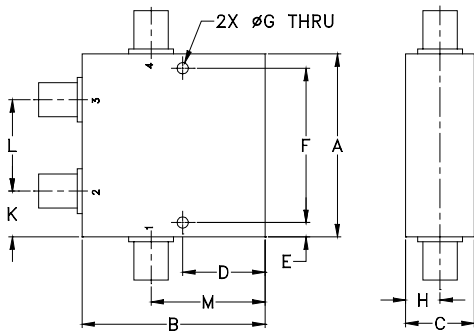
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
DC Current	1.0A

* 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

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

Features

- excellent directivity, 25 dB typ.
- low mainline loss, 0.3 dB typ.
- high power, up to 10W
- rugged shielded case
- DC current through input to output 1.0A Max. at 1.0 watt RF input power.

Applications

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

Bi-Directional Coupler Electrical Specifications

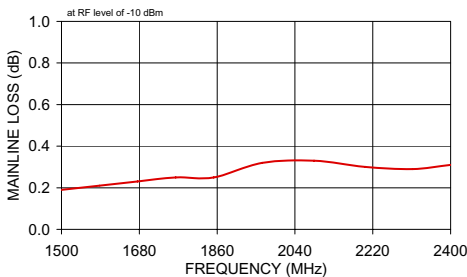
FREQ. RANGE (MHz)	COUPLING (dB)		MAINLINE LOSS ¹ (dB)		DIRECTIVITY (dB)		VSWR (:1)	POWER INPUT (W)
	Norm.	Flatness	Typ.	Max.	Typ.	Min.		
1500-2400	19.5±1.0	±1.0	0.3	0.5	25	18	1.2	10

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

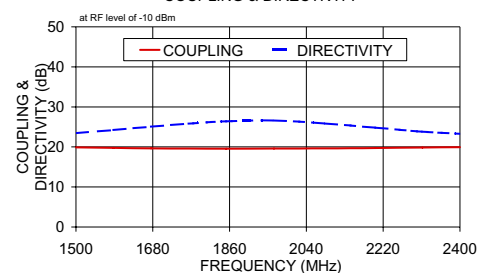
Typical Performance Data

Frequency (MHz)	Mainline Loss (dB)	Coupling (dB)	Directivity (dB)	Return Loss (dB)		
				In-Out	In-Cpl	Cpl
1500.00	0.19	19.90	23.45	27.51	28.35	24.98
1588.00	0.21	19.75	24.21	28.25	29.14	25.69
1676.00	0.23	19.63	25.06	29.19	30.06	26.19
1764.00	0.25	19.59	25.82	30.29	31.05	26.11
1852.00	0.25	19.56	26.41	31.74	32.30	25.22
1964.00	0.32	19.62	26.62	34.28	34.41	23.34
2084.00	0.33	19.65	25.86	38.45	37.76	21.21
2202.00	0.30	19.71	24.82	43.89	43.16	19.38
2312.00	0.29	19.85	23.81	42.07	48.30	18.05
2400.00	0.31	19.93	23.26	38.87	48.51	17.31

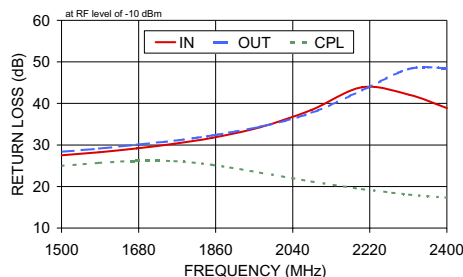
ZABDC20-2400
MAINLINE LOSS



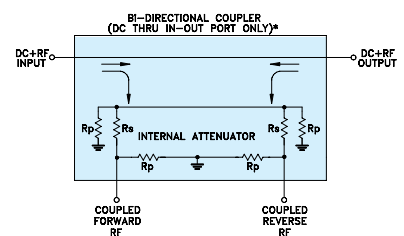
ZABDC20-2400
COUPLING & DIRECTIVITY



ZABDC20-2400
RETURN LOSS



Electrical Schematic



* ELECTRICAL SCHEMATIC IS FOR BI-DIRECTIONAL COUPLER WITH INTERNAL ATTENUATORS AT COUPLING PORTS.

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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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ZABDC20-2400+
ZABDC20-2400



CASE STYLE: DD477

Connectors	Model	Price	Qty.
SMA	ZABDC20-2400-S(+)	\$89.95 ea.	(1-9)

+RoHS Compliant

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

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ZABDC20-2400
WP/TD/CP/AM
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