THE DATASHEET OF

ZFBDC20-62HP-S+

COAXIAL

Bi-Directional Coupler ZFBDC20-62HP+

50Ω Up to 50W 10 to 600 MHz

FEATURES

- Excellent mainline loss, 0.25 dB typ.
- Excellent directivity, 25 dB typ.
- High power, up to 50W
- Rugged shielded case

Generic photo used for illustration purposes only

CASE STYLE: JD1252

Connectors	Model
BNC	ZFBDC20-62HP+
SMA	ZFBDC20-62HP-S+

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

APPLICATIONS

- Power leveling & monitoring
- Military mobile

ELECTRICAL SPECIFICATIONS

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Units
Frequency Range		10		600	MHz
Mainline Loss[1]	10-600 10-450		0.25 0.20	0.70 0.50	dB
Coupling Nominal	10-600 10-450		20.0±0.5 20.2±0.5		dB
Coupling Flatness (±)	10-600 10-450		±0.9 ±0.5		dB
Directivity	10-600 10-450	16 19	25 28		dB
VSWR	10-600 10-450		1.05 1.05		:1
Input Power[2]	10-600 10-450			25 50	W

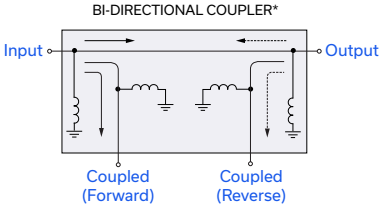
1. Mainline loss includes theoretical power loss at coupled port.
2. Power rating is specified up to +55°C. Power Input Specifications at +100°C is 50% value at +55°C. For specifications limits between +55°C and +100°C, derate linearly.

MAXIMUM RATINGS

Parameter	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.

ELECTRICAL SCHEMATIC



*Electrical schematic is for Bi-Directional coupler with internal transformer(s) that routes DC from all ports to ground

REV. E
ECO-015496
ZFBDC20-62HP+
MCL NY
221019

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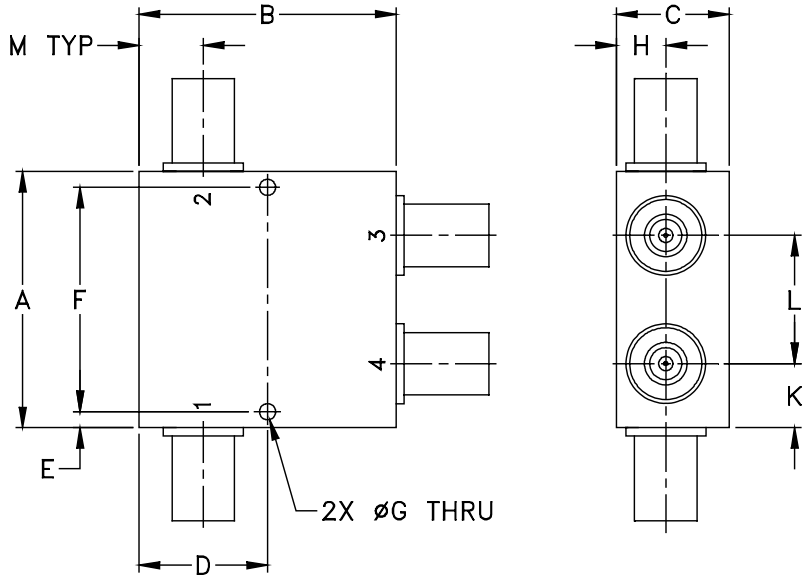
COAXIAL CONNECTIONS

Input	1
Output	2
Coupled (Forward)	4
Coupled (Reverse)	3

OUTLINE DRAWING



OUTLINE DIMENSIONS (Inch / mm)

A	B	C	D	E	F	G
2.00	2.00	.88	1.000	0.13	1.750	0.125
50.80	50.80	22.35	25.40	3.30	44.45	3.18

H	J	K	L	M	wt
0.38	--	0.50	1.00	0.50	grams
9.65	--	12.70	25.40	12.70	250.0

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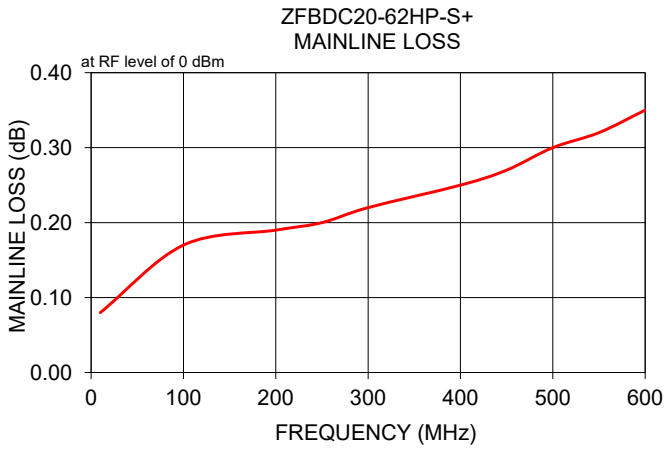
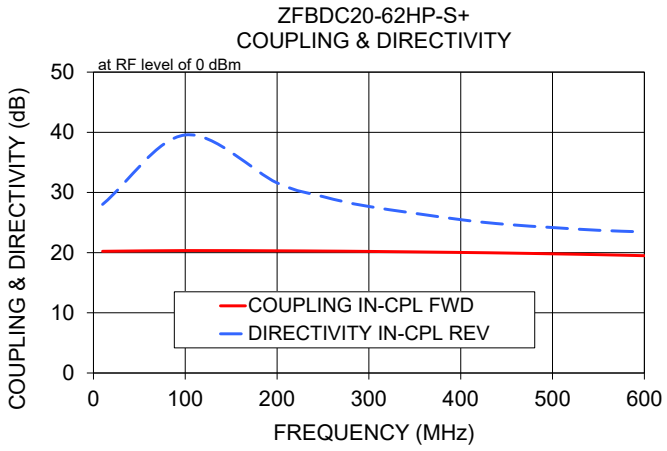
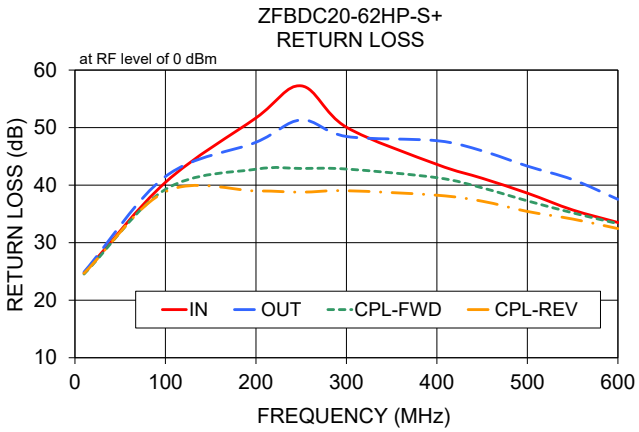
TYPICAL PERFORMANCE DATA AND CHARTS

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
10.00	0.08	20.22	20.16	28.32	28.02	24.73	24.90	24.55	24.68
100.00	0.17	20.34	20.24	38.07	39.56	40.49	41.50	39.26	38.86
200.00	0.19	20.30	20.29	30.76	31.59	51.68	47.45	42.77	39.00
250.00	0.20	20.26	20.29	28.54	29.31	57.26	51.33	42.90	38.78
300.00	0.22	20.20	20.30	27.39	27.67	50.07	48.46	42.80	39.03
400.00	0.25	20.03	20.26	25.18	25.48	43.61	47.73	41.30	38.25
450.00	0.27	19.93	20.22	24.33	24.69	41.20	45.96	39.53	37.21
500.00	0.30	19.80	20.15	23.67	24.17	38.61	43.31	37.27	35.43
550.00	0.32	19.66	20.07	23.13	23.71	35.69	40.97	35.19	34.11
600.00	0.35	19.49	19.95	22.75	23.44	33.51	37.54	33.31	32.45







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.
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