

35dB DC Pass

High Power Directional Coupler

ZGDC35-93HP+

50Ω Up to 250W 900 to 9000 MHz

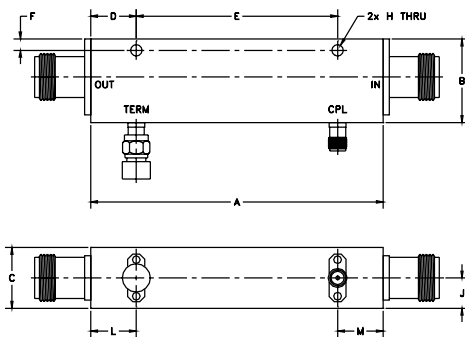
Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
DC Current	3A
Permanent damage may occur if any of these limits are exceeded	

Coaxial Connections

INPUT	IN(N-Type)
OUTPUT	OUT(N-Type)
COUPLED (FORWARD)	CPL(FWD)(SMA)
COUPLED (REVERSE)	TERM(SMA)

Outline Drawing



Outline Dimensions (inch/mm)

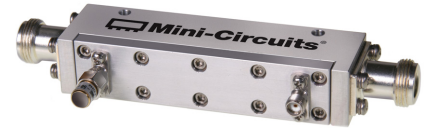
A	B	C	D	E	F	G
3.85	1.10	.80	.60	2.650	.15	—
97.79	27.94	20.32	15.24	67.31	3.81	—
H	J	K	L	M		wt
.150	.40	.50	.60	.60		grams
3.81	10.16	12.70	15.24	15.24		200.0

Features

- wide frequency range can be used for 0.8-12.4 GHz
- good coupling flatness, ± 0.8 dB typ. over 1050-8000 MHz
- high directivity, 25 dB typ.
- very good VSWR, 1.10:1 typ.
- high power, up to 250W
- DC current pass through input to output

Applications

- cellular
- lab use
- WiMAX
- ISM
- PCN
- GSM



CASE STYLE: HT1633

Connectors	Model	Price	Qty.
N-Type/SMA	ZGDC35-93HP+	\$695.00	(1-9)

+RoHS Compliant

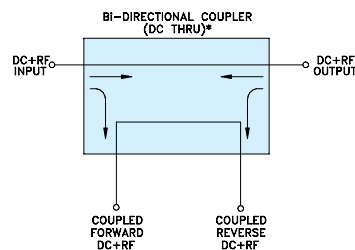
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Electrical Specifications at 25°C

Parameter	Condition (MHz)	Min.	Typ.	Max.	Unit
Frequency Range		900		9000	MHz
Mainline Loss (above theoretical 0.0015 dB)	900 6000 9000	— — —	0.03 0.10 0.18	0.2 0.25 0.3	dB
Coupling Flatness($\pm$)	900 - 1050 1050 - 8000 8000 - 9000	— — —	± 0.5 ± 0.8 ± 0.6	± 0.8 ± 1.2 ± 0.95	dB
Coupling	900 - 1050 1050 - 8000 8000 - 9000	34.0 32.5 32.4	35.4 34.5 34.3	36.8 36.5 36.2	dB
Directivity	900 3000 6000 8000 9000	22 20 14 12 8	26 25 19 16 11	— — — — —	dB
Return Loss (Input)	900 - 6000 6000 - 9000	16 14	19 17	— —	dB
Return Loss (Output)	900 - 6000 6000 - 9000	16 14	19 18	— —	dB
Return Loss (Coupling)	900 - 6000 6000 - 9000	17 14	22 18	— —	dB
Input Power ¹	900 - 6000	—	—	250	W

1. At 25°C with no DC current. Derate linearly to 200W (900-9000 MHz) and to 100W (600-9000 MHz) from 25°C to 100°C. Output load VSWR 2.0:1 max.

Electrical Schematic



* ELECTRICAL SCHEMATIC IS FOR BI-DIRECTIONAL COUPLER WITHOUT INTERNAL TRANSFORMERS AND RESISTORS.

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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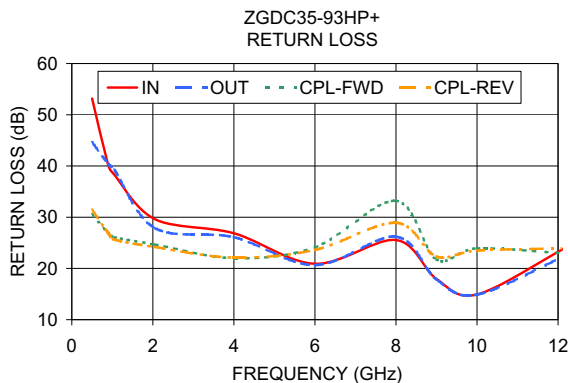
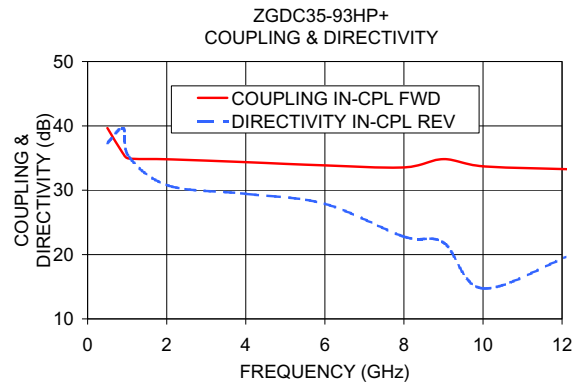
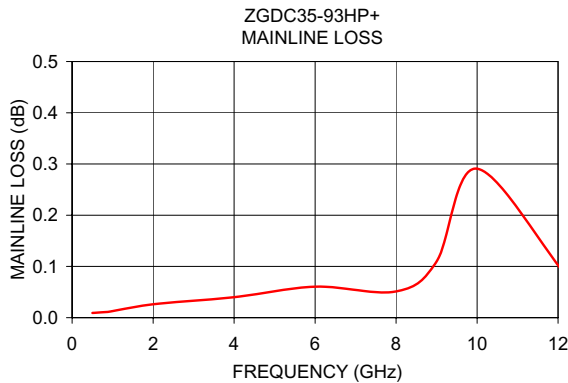


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M132569
ZGDC35-93HP+
AV/CP/AM
131015
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Typical Performance Data

Frequency (GHz)	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
0.50	0.01	39.67	39.65	32.09	37.34	53.17	44.63	30.52	31.43
0.90	0.01	35.66	35.68	27.52	39.60	40.19	40.41	26.91	26.92
1.05	0.01	34.93	34.95	27.19	35.15	38.28	39.24	26.08	25.64
2.05	0.03	34.81	34.90	25.04	30.70	29.63	27.89	24.67	24.19
4.00	0.04	34.36	34.44	15.74	29.43	26.87	26.10	22.01	22.11
6.00	0.06	33.85	33.92	18.98	27.88	20.90	20.66	24.12	23.62
8.00	0.05	33.55	33.61	17.80	22.78	25.55	26.20	33.19	28.92
9.00	0.11	34.83	34.91	13.32	21.86	17.93	17.86	21.76	22.31
10.00	0.29	33.72	33.81	18.42	14.74	14.92	14.88	23.92	23.49
12.30	0.07	33.23	33.31	13.69	20.13	24.55	22.91	22.88	23.95



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