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)

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

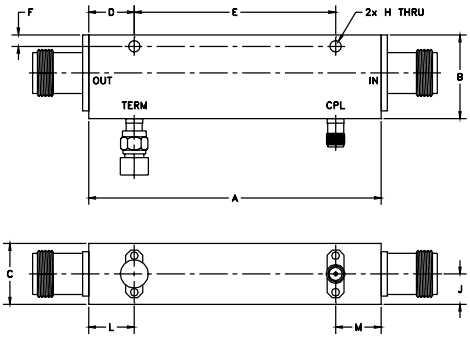
CASE STYLE: HT1633

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

Outline Drawing



Outline Dimensions (inch / mm)

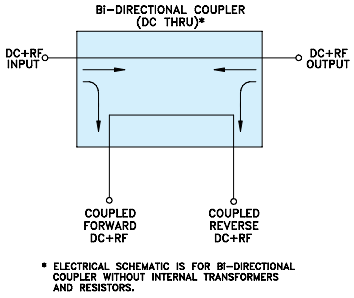
A	B	C	D	E	F	G
3.85	1.10	.80	.60	2.650	.15	—
97.79	27.94	20.32	15.24	67.31	3.81	—
H	**J**	**K**	**L**	**M**		**wt**
.150	.40	.50	.60	.60		grams
3.81	10.16	12.70	15.24	15.24		200.0

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	—	0.03	0.2	dB
	6000	—	0.10	0.25	
	9000	—	0.18	0.3	
Coupling Flatness(±)	900 - 1050	—	±0.5	±0.8	dB
	1050 - 8000	—	±0.8	±1.2	
	8000 - 9000	—	±0.6	±0.95	
Coupling	900 - 1050	34.0	35.4	36.8	dB
	1050 - 8000	32.5	34.5	36.5	
	8000 - 9000	32.4	34.3	36.2	
Directivity	900	22	26	—	dB
	3000	20	25	—	
	6000	14	19	—	
	8000	12	16	—	
	9000	8	11	—	
Return Loss (Input)	900 - 6000	16	19	—	dB
	6000 - 9000	14	17	—	
Return Loss (Output)	900 - 6000	16	19	—	dB
	6000 - 9000	14	18	—	
Return Loss (Coupling)	900 - 6000	17	22	—	dB
	6000 - 9000	14	18	—	
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



Notes

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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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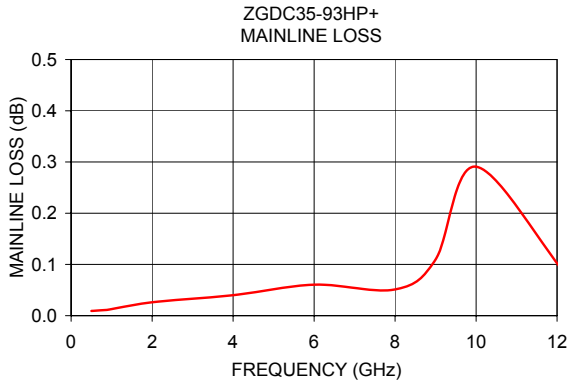
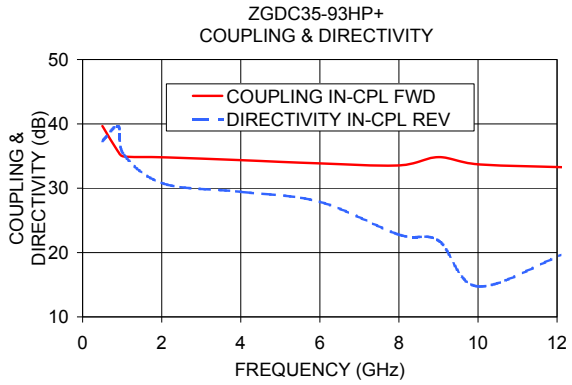
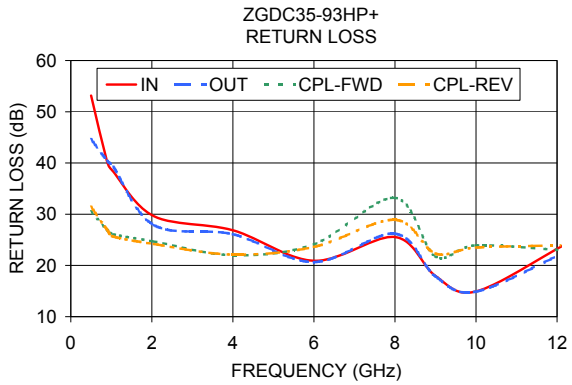
Typical Performance Data

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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