

Coaxial High Power Amplifier

ZHL-03-5WF

50Ω 5W 60 to 300 MHz

Features

- High power, +39dBm typ.
- Low noise figure, 3 dB typ.
- High IP3, +49 dBm typ.
- Class A amplifier
- Available with built-in fan with thermal shut-off

Applications

- VHF transmitters
- instrumentation
- test equipment



Model No.	ZHL-03-5WF	ZHL-03-05WFX [▲]
Case Style	CP641	
Connectors	SMA	
Price (Qty.)	\$495.00 ea. (1-9)	\$445.00 ea. (1-9)

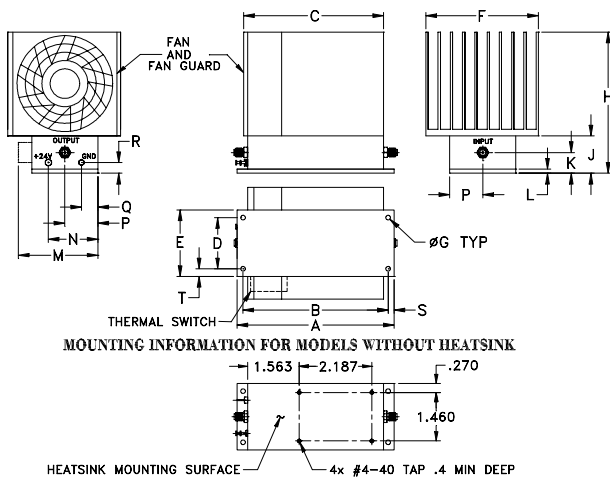
Electrical Specifications

Parameter	ZHL-03-5WF			ZHL-03-5WF [▲]			Units
	Min.	Typ.	Max.	Min.	Typ.	Max.	
Frequency Range	60		300	60		300	MHz
Gain	30			30			dB
Gain Flatness			±1.0			±1.0	dB
Output Power at 1dB compression	+36			+36			dBm
Noise Figure		3.0			3.0		dB
Output third order intercept point		+49			+49		dBm
Input VSWR		1.4			1.4		:1
Output VSWR		1.5			1.5		:1
DC Supply Voltage		24			24		V
Supply Current			2.8			2.8	A

Open load is not recommended, potentially can cause damage.
With no load derate max. input power by 20dB.

[▲] Heat sink and fan not included. Alternative heat sinking and heat removal must be provided by the user to limit maximum base-plate temperature to 85°C, in order to ensure proper performance. For reference, this requires thermal resistance of user's external heat sink to be 0.08°C/W max.

Outline Drawing



Maximum Ratings

Parameter	Ratings
Operating Temperature	-20°C to 65°C
Storage Temperature	-55°C to 100°C
Base Plate Temperature	85°C
DC Voltage	28V
Input RF Power (no damage)	+10 dBm

Permanent damage may occur if any of these limits are exceeded.

Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	wt
4.75	4.375	4.18	1.540	2.00	3.36	.144	4.24	1.12	.58	.125	2.38	1.50	1.00	.50	.34	.19	.23	grams*
120.65	111.13	106.17	39.12	50.80	85.34	3.66	107.70	28.45	14.73	3.18	60.45	38.10	25.40	12.70	8.64	4.83	5.84	750

*290 grams without heatsink



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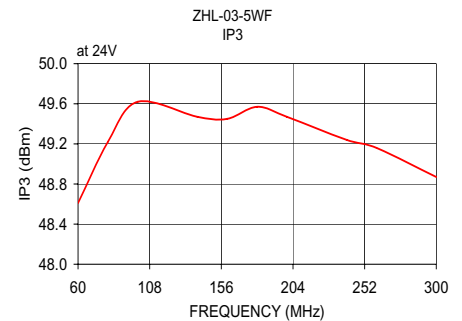
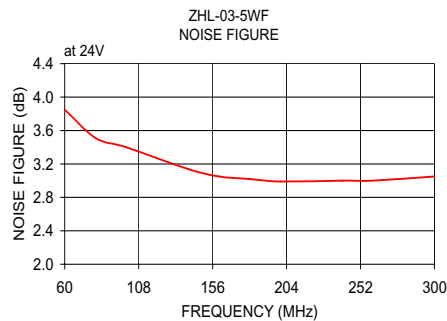
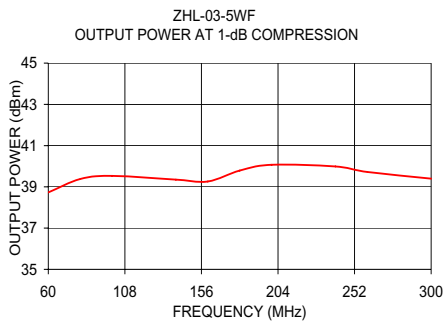
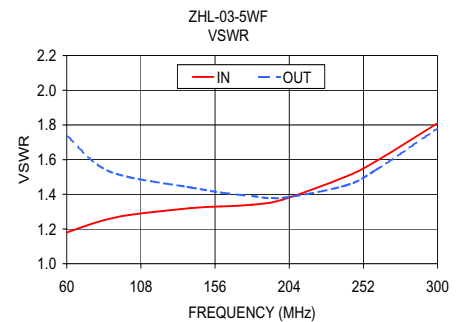
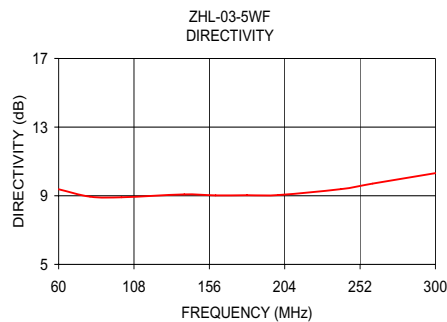
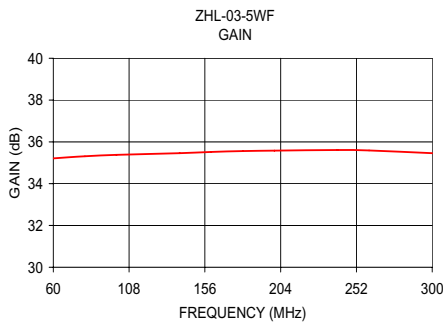
IF/RF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

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FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR (:1)		NOISE FIGURE (dB)	P _{OUT} at 1 dB COMPR. (dBm)	IP ₃ (dBm)
	24V		IN	OUT			
60.00	35.21	9.38	1.18	1.74	3.85	38.73	48.61
80.00	35.31	8.95	1.24	1.57	3.51	39.38	49.22
100.00	35.38	8.91	1.28	1.50	3.40	39.53	49.62
140.00	35.46	9.08	1.32	1.44	3.14	39.35	49.47
160.00	35.52	9.02	1.33	1.41	3.05	39.26	49.45
180.00	35.56	9.03	1.34	1.39	3.02	39.79	49.57
200.00	35.58	9.04	1.37	1.38	2.99	40.07	49.47
240.00	35.61	9.39	1.50	1.45	3.00	39.99	49.24
260.00	35.59	9.71	1.59	1.54	3.00	39.72	49.16
300.00	35.46	10.32	1.81	1.78	3.05	39.40	48.87



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