

# Coaxial Amplifier

## ZFL-1000H

50Ω Medium Power 10 to 1000 MHz

### Features

- wideband, 10 to 1000 MHz
- low noise, 5 dB typ.
- high IP3, +33 dBm typ.
- protected by US Patent, 6,943,629

### Applications

- cellular
- VHF/UHF
- test equipment



ZFL-1000HX

ZFL-1000H

CASE STYLE: SS98

Connectors	Model	Price	Qty.
SMA	ZFL-1000H	\$219.00 ea.	(1-9)
<b>BRACKET (OPTION "B")</b>		\$2.50	(1+)
SMA	ZFL-1000HX	\$209.00 ea.	(1-9)

### Amplifier Electrical Specifications

MODEL NO.	FREQUENCY (MHz)		GAIN (dB)		MAXIMUM POWER (dBm)		DYNAMIC RANGE		VSWR (:1) Typ.		DC POWER	
	$f_L$	$f_U$	Min.	Flatness Max.	Output (1 dB Compr.)	Input (no damage)	NF (dB) Typ.	IP3 (dBm) Typ.	In	Out	Volt (V) Nom.	Current (mA) Max.
ZFL-1000H	10	1000	28	±1.0	+20	+5	5.0	+33	2.0	2.0	15	160
ZFL-1000HX*	10	1000	28	±1.0	+20	+5	5.0	+33	2.0	2.0	15	160

\* Heat sink not included

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

To order without heat sink, add suffix X to model number. Alternative heat sinking and heat removal must be provided by the user to limit maximum temperature to 71°C, in order to ensure proper performance. For reference, this requires thermal resistance of user's external heat sink to be 15°C/W Max.

### Maximum Ratings

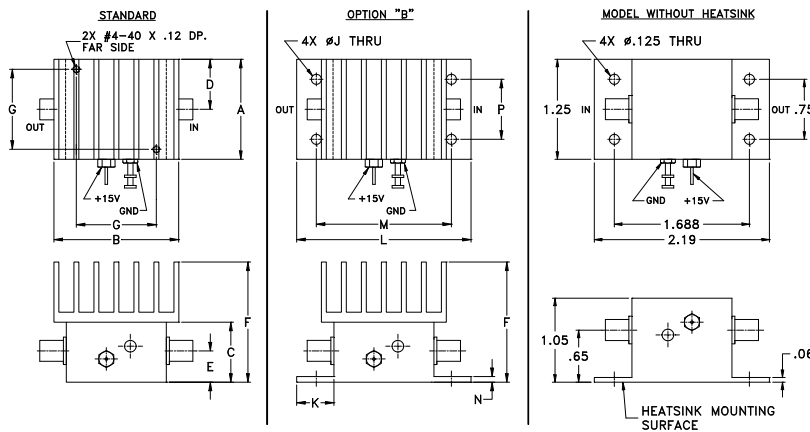
Operating Temperature -20°C to 71°C

Storage Temperature -55°C to 100°C

DC Voltage +17V Max.

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

### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	wt*
1.25	1.56	.75	.63	.39	1.50	1.000	--	.125	.46	2.19	1.688	.06	.750	grams
31.75	39.62	19.05	16.00	9.91	38.10	25.40	--	3.18	11.68	55.63	42.88	1.52	19.05	85.0

\*70 grams with heat sink



For detailed performance specs & shopping online see web site

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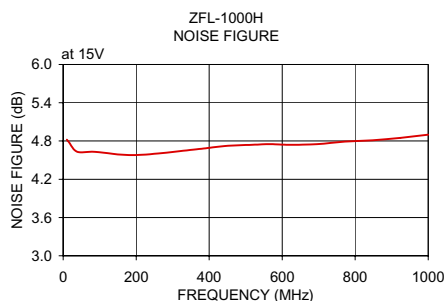
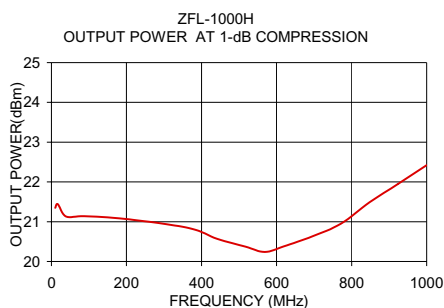
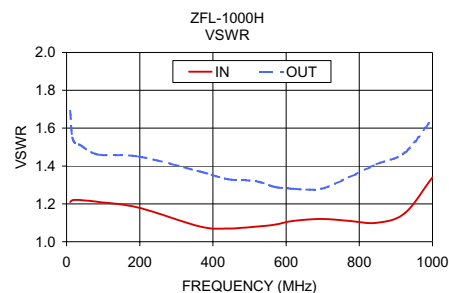
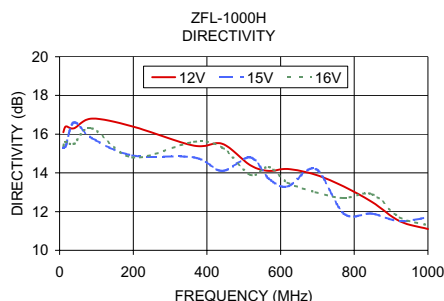
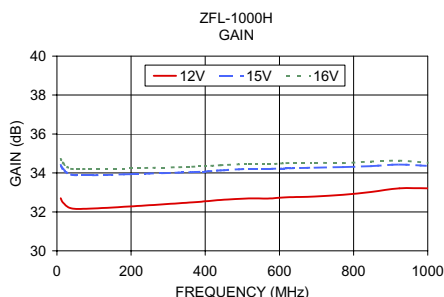
IF/RF MICROWAVE COMPONENTS

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuits' applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp).

# Typical Performance Data/Curves

# ZFL-1000H

FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	12V	15V	16V	12V	15V	16V	IN	OUT		
10.00	32.70	34.40	34.71	16.10	15.30	15.40	1.21	1.69	4.82	21.35
17.20	32.46	34.18	34.49	16.40	15.40	15.60	1.22	1.54	4.77	21.44
38.80	32.18	33.91	34.21	16.30	16.60	15.50	1.22	1.51	4.63	21.13
87.60	32.17	33.88	34.20	16.80	15.80	16.30	1.21	1.46	4.63	21.14
197.60	32.28	33.94	34.24	16.40	14.90	14.80	1.18	1.45	4.58	21.07
365.40	32.49	34.04	34.32	15.40	14.80	15.60	1.08	1.37	4.67	20.84
441.50	32.61	34.13	34.40	15.50	14.10	15.30	1.07	1.33	4.72	20.57
517.70	32.69	34.21	34.46	14.40	14.80	13.90	1.08	1.32	4.74	20.37
568.50	32.68	34.20	34.45	14.10	13.70	14.30	1.09	1.29	4.75	20.24
619.20	32.75	34.24	34.50	14.20	13.30	13.50	1.11	1.28	4.74	20.38
695.40	32.79	34.27	34.52	13.90	14.20	13.00	1.12	1.28	4.75	20.63
771.50	32.88	34.30	34.50	13.30	11.90	12.70	1.11	1.34	4.79	20.95
847.70	33.02	34.35	34.58	12.50	11.90	12.90	1.10	1.41	4.81	21.49
923.80	33.21	34.43	34.63	11.50	11.50	11.70	1.15	1.47	4.85	21.95
1000.00	33.21	34.36	34.52	11.10	11.70	11.30	1.34	1.65	4.90	22.42



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