

# Coaxial Amplifier

## ZFL-1000+ ZFL-1000

50Ω Low Power 0.1 to 1000 MHz

### Features

- wideband, 0.1 to 1000 MHz
- rugged, shielded case
- protected by US Patent, 6,943,629

### Applications

- VHF/UHF
- cellular
- instrumentation
- lab use



CASE STYLE: Y460

Connectors	Model	Price	Qty.
SMA	ZFL-1000(+)	\$79.95 ea.	(1-9)
BRACKET (OPTION "B")		\$2.50	(1+)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

### Amplifier Electrical Specifications

MODEL NO.	FREQUENCY (MHz)		GAIN (dB)		MAXIMUM POWER (dBm)		DYNAMIC RANGE		VSWR (:1) Typ.		DC POWER	
	f <sub>L</sub>	f <sub>U</sub>	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-1000(+)	0.1	1000	17	±0.7	+9*	+5	6.0	+18	1.5	2.1*	15	105

\* Output VSWR 2.8:1 maximum over 750-1000 MHz, 1 dB compression +7dBm at 500-1000 MHz

Open load is not recommended, potentially can cause damage.

With no load derate max input power by 20 dB

### Maximum Ratings

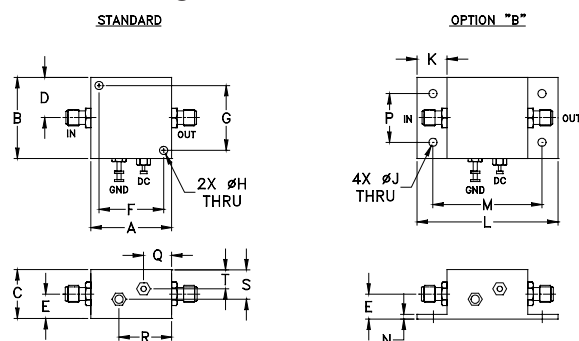
Operating Temperature -20°C to 71°C

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	Q	R	S	T	wt.
1.25	1.25	.75	.63	.36	1.000	1.000	.125	.125	.46	2.18	1.688	.06	.750	.50	.80	.45	.29	grams
31.75	31.75	19.05	16.00	9.14	25.40	25.40	3.18	3.18	11.68	55.37	42.88	1.52	19.05	12.70	20.32	11.43	7.37	38

**Mini-Circuits**  
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

IF/RF MICROWAVE COMPONENTS

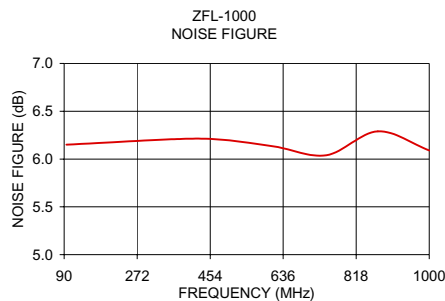
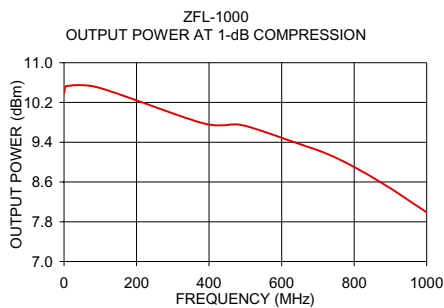
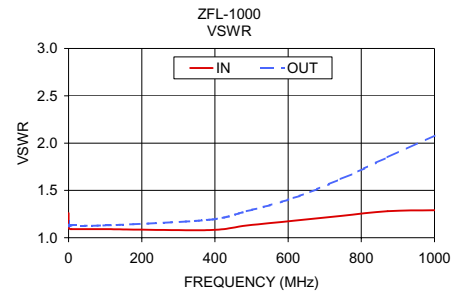
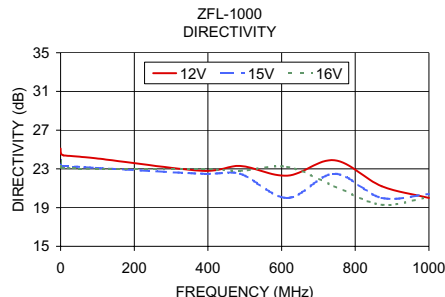
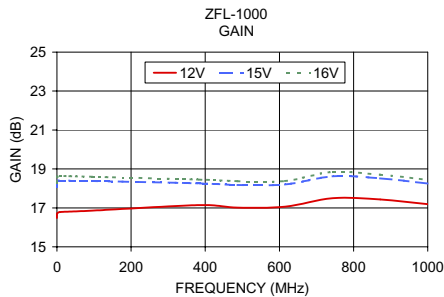
Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established 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).

REV. B  
M125525  
ZFL-1000  
091203  
Page 1 of 2

# Typical Performance Data/Curves

# ZFL-1000+ ZFL-1000

FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1) 15V		NOISE FIGURE (dB) 15V	POUT at 1 dB COMPR. (dBm) 15V
	12V	15V	16V	12V	15V	16V	IN	OUT		
0.10	16.48	18.08	18.31	25.10	23.90	23.80	1.26	1.17	—	10.39
0.70	16.72	18.38	18.60	24.60	23.30	23.10	1.10	1.12	—	10.43
7.90	16.79	18.40	18.64	24.40	23.30	23.10	1.09	1.13	—	10.53
95.70	16.86	18.38	18.60	24.10	23.10	23.00	1.09	1.13	6.15	10.50
384.70	17.14	18.26	18.45	22.80	22.50	23.00	1.08	1.19	6.21	9.78
487.20	17.01	18.18	18.37	23.30	22.50	22.80	1.13	1.28	6.20	9.75
615.40	17.06	18.20	18.38	22.30	20.00	23.20	1.18	1.42	6.13	9.45
743.60	17.50	18.62	18.85	23.90	22.50	21.20	1.23	1.62	6.04	9.11
871.80	17.43	18.52	18.70	21.20	20.00	19.30	1.28	1.85	6.29	8.60
1000.00	17.19	18.25	18.44	20.00	20.40	20.10	1.29	2.08	6.09	7.99



ISO 9001 ISO 14001 AS 9100 CERTIFIED

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

IF/RF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

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-Circuit's 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).