

Coaxial Amplifier

ZFL-500

50Ω Low Power 0.05 to 500 MHz

Features

- wideband, 0.05 to 500 MHz
- rugged, shielded case
- low noise, 5.3 dB typ.
- protected by US Patent, 6,943,629

Applications

- instrumentation
- lab use
- VHF/UHF



SMA version shown

CASE STYLE: Y460

Connectors	Model	Price	Qty.
SMA	ZFL-500	\$69.95	(1-9)
BNC	ZFL-500-BNC	\$74.95	(1-9)
BRACKET (OPTION "B")		\$2.50	(1+)

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-500	0.05	500	20	±1.0	—	+9	+5	5.3	+18	1.9	1.9	15	80

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

L= low range (f_L to $f_U/2$)

U= upper range ($f_U/2$ to f_U)

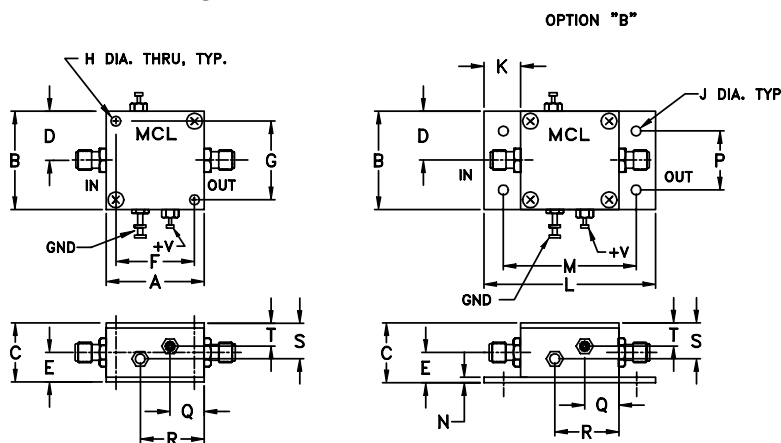
Maximum Ratings

Operating Temperature -20°C to 71°C

Storage Temperature -55°C to 100°C

DC Voltage +17V Max.

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K
1.25	1.25	.75	.63	.36	1.000	1.000	.125	.125	.46
31.75	31.75	19.05	16.00	9.14	25.40	25.40	3.18	3.18	11.68
L	M	N	P	Q	R	S	S	wt.	
2.18	1.688	.06	.750	.50	.80	.45	.29	grams	
55.37	42.88	1.52	19.05	12.70	20.32	11.43	7.37	38	



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P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

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Typical Performance Data/Curves

ZFL-500

FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1) 15V		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	12V	15V	16V	12V	15V	16V	IN	OUT		
0.05	20.18	21.24	21.41	18.10	17.50	17.40	1.59	1.69	—	10.52
0.33	21.00	22.06	22.23	16.40	15.70	15.60	1.17	1.11	—	10.82
3.90	21.03	22.08	22.27	16.30	15.60	15.50	1.09	1.11	—	10.84
47.90	21.08	22.13	22.30	16.10	15.40	15.30	1.07	1.11	5.72	10.87
192.30	20.96	21.93	22.07	15.40	15.90	17.10	1.01	1.01	5.74	10.31
243.60	20.79	21.74	21.90	16.80	17.20	16.80	1.01	1.01	5.76	10.28
307.70	20.74	21.70	21.84	16.20	16.60	16.60	1.01	1.02	5.77	10.26
371.80	20.58	21.55	21.70	16.40	17.20	17.60	1.01	1.02	5.77	10.23
435.90	20.69	21.65	21.80	15.70	16.80	16.10	1.01	1.03	5.78	10.14
500.00	20.40	21.36	21.52	17.10	17.70	16.70	1.01	1.02	5.79	10.05

