

M7G-VHF150-30

**EMR  
CORP.**

**SERVICE MANUAL**

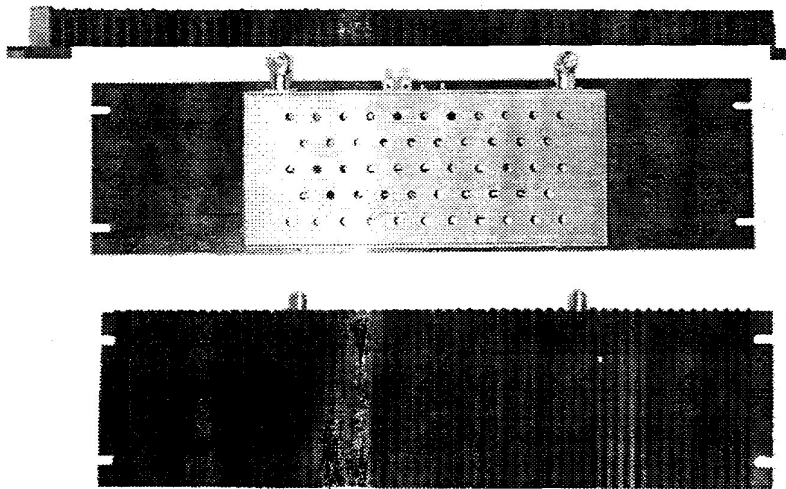
**VHF 150-30 SERIES  
150-170 MHz AMPS**

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Email: [info@emrcorp.com](mailto:info@emrcorp.com) <http://www.emrcorp.com>

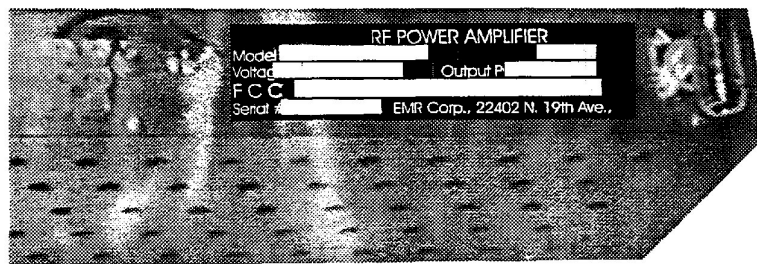
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The VHF 150-30 Series of EMR amplifiers are intended for use in commercial communications systems. Applications include land mobile repeaters, trunking and data systems. They will cover the frequency range extending from 150 MHz to 170 MHz

For operator convenience, views of the top, front, and side of the amplifier are presented here.



FCC Type Acceptance Label Placement



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PRODUCT DESCRIPTION

FREQUENCY RANGE: 150-170 MHz

OPERATING MODE: FM

MODEL #: VHF 150-30

OUTPUT POWER: 30 WATTS

OPERATING TEMPERATURE RANGE: -20 to +50 Deg. C

OPERATING VOLTAGE: +13.6 VDC / 12 amps

DUTY CYCLE: 100%

HARMONIC ATTENUATION: Meets FCC Type Acceptance

OPTIONS: EMR Amplifiers are available with several mechanical mounting options and in various configurations. (Specified at time of order.)

FCC TYPE  
ACCEPTANCE  
LABEL

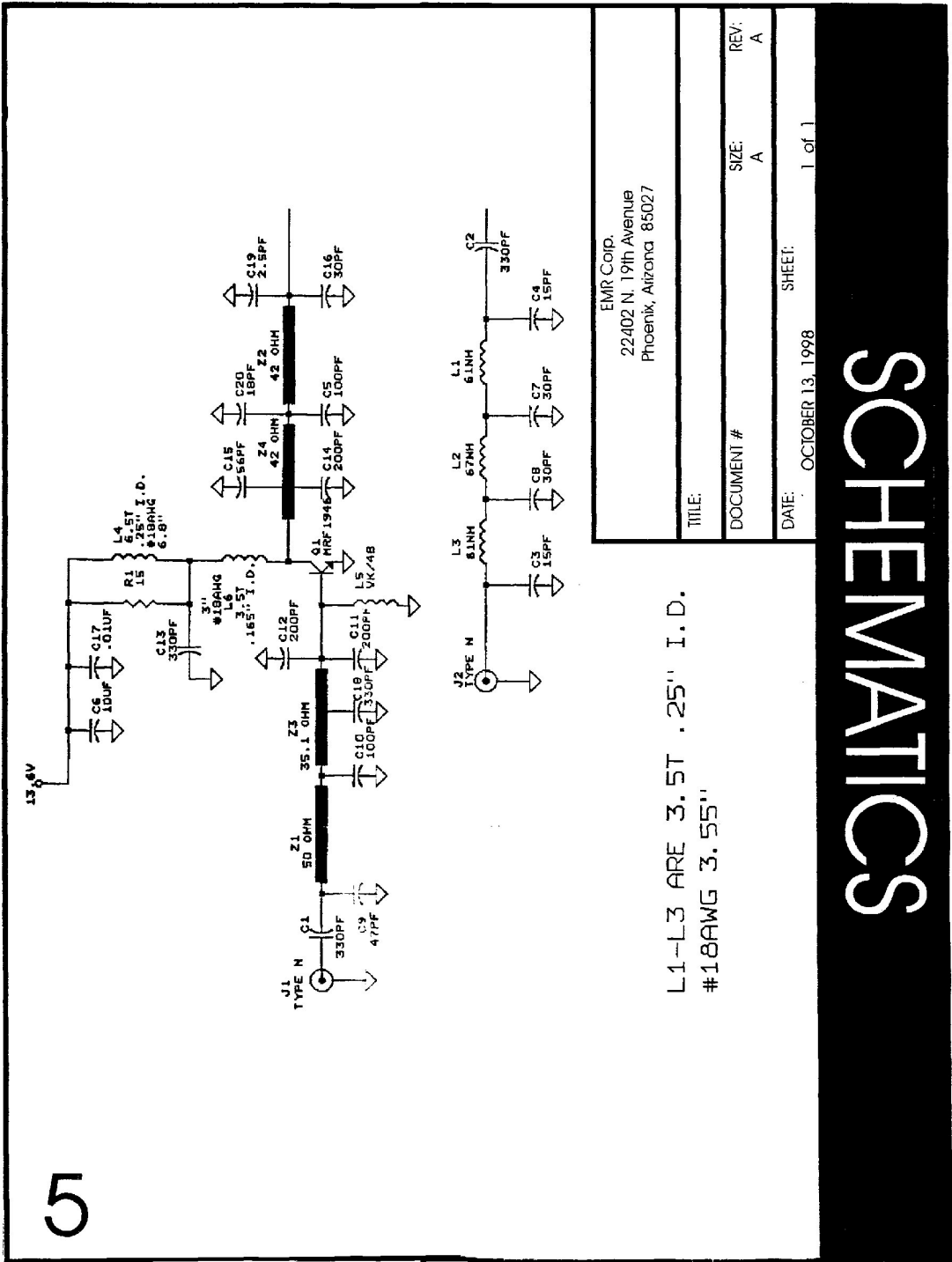


**3** For placement see: PRODUCT SPECIFICATIONS

**GENERAL SPECIFICATIONS**

The VHF 150-30 Series power amplifier is a self-contained rack mountable unit capable of up to 30 watts of class c output power. The input signal is amplified by a transistor capable of producing 30 watts and then filtered by a five element low pass filter.

# CIRCUIT DESCRIPTIONS



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L1-L3 ARE 3.5T .25" I.D.  
#18AWG 3.55"

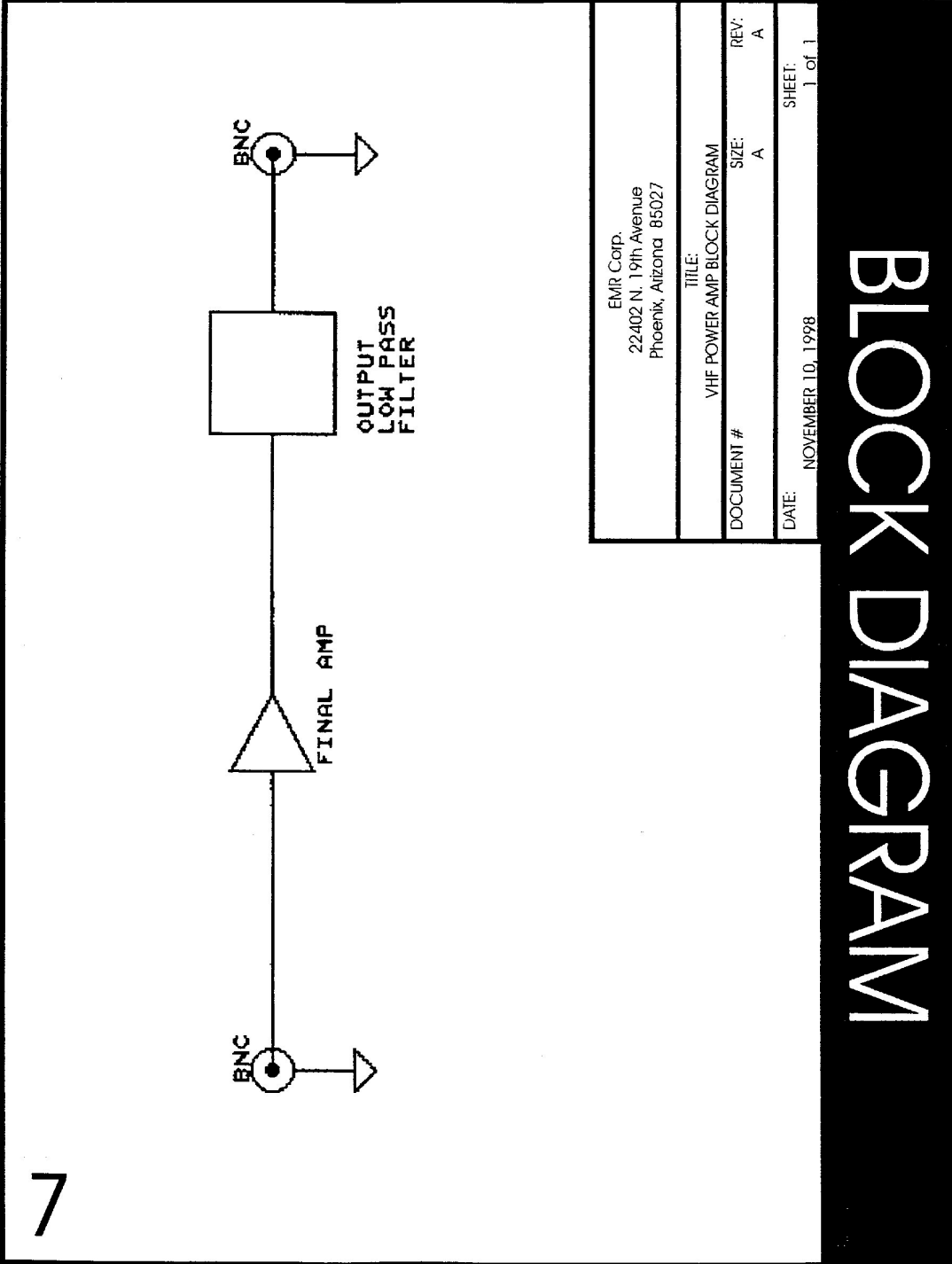
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TITLE:	
DOCUMENT #	SIZE: A
DATE: OCTOBER 13, 1998	REV: A
SHEET: 1 of 1	

# SCHEMATICS

30 WATT POWER AMP  
150 - 170 MHz  
Bill of Materials    October 13, 1998

ITEM	QUANTITY	REFERENCE	PART
1	4	C1,C2,C13,C18	330PF
2	2	C3,C4	15PF
3	2	C5,C10	100PF
4	1	C6	10UF
5	3	C7,C8, C16	30PF
6	1	C9	47PF
7	3	C11,C12,C14	200PF
8	1	C15	56PF
9	1	C17	.01PF
10	1	C19	2.5UF
11	1	C20	18PF
12	2	J1,J2	TYPE N
13	2	L1,L3	61NH
14	1	L2	67NH
15	1	L4	6.5T
16	1	L5	VK/4B
17	1	L6	3.5T
18	1	Q1	MRF 1946
19	1	R1	15
20	1	Z1	50 OHM
21	2	Z2,Z4	42 OHM
22	1	Z3	35.1 OHM

PARTS LIST



EMR Corp. 22402 N. 19th Avenue Phoenix, Arizona 85027	
TITLE: VHF POWER AMP BLOCK DIAGRAM	
DOCUMENT #	SIZE: A
DATE: NOVEMBER 10, 1998	REV: A
SHEET: 1 of 1	

# BLOCK DIAGRAM



EMR Corporation, hereinafter called EMR, warrants that all equipment of its manufacture shall be free from defects in design, materials and workmanship for a period of 12 months from date of shipments unless otherwise covered by special warranty. If any such product, entirely or in part, fails to produce the performance set forth in the brochures, quotations or literature provided by EMR, such product will be replaced or repaired at EMR's expense provided that the failure was not the result of alternation, misuse, tampering, misapplication, shipping damage or vandalism. If a product failure is found to be the fault of EMR, costs of transportation to the EMR factory and return will be born by EMR. Should EMR supply components not of its own manufacture, but specified by a customer, the warranty shall reflect the original manufactures warranty, only.

It is understood that this statement constitutes EMR's entire and only warranty, there being no other warranties expressed or implied in law or in fact, including implied warranties of fitness. In no event shall EMR be liable for damages either direct or consequential, that may be occasioned by any defect in materials, workmanship or product support.

For service on this amplifier, contact:

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WARRANTY INFORMATION



