

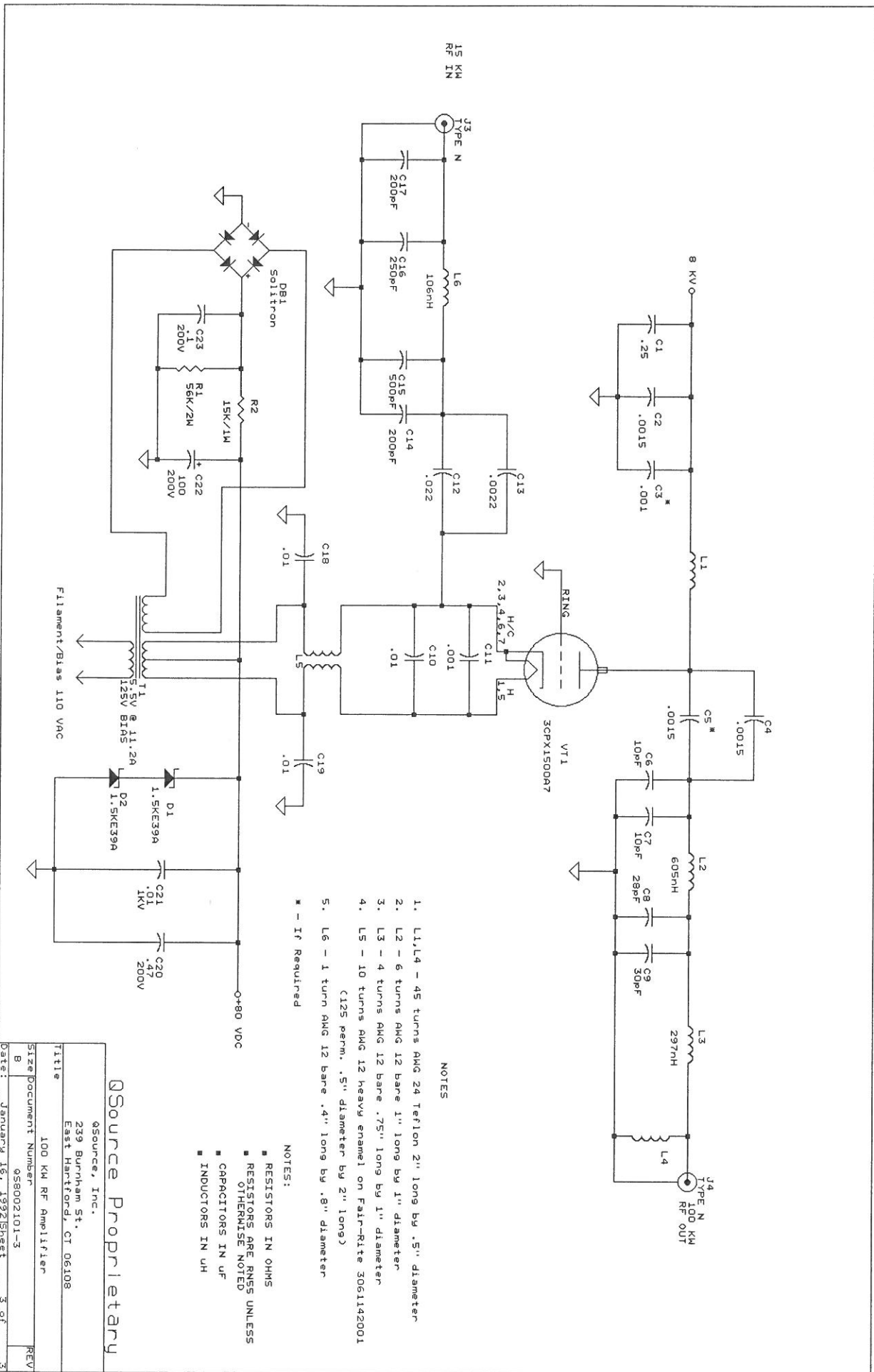
- NOTES
1. K1 - 5 minute delay on break
 2. K2 - 3 minute delay on make
 3. K3 - 7 second delay on make

- NOTES:
- RESISTORS IN OHMS
 - RESISTORS ARE RMS UNLESS OTHERWISE NOTED
 - CAPACITORS IN UF
 - INDUCTORS IN uH

Source Proprietary

QSource, Inc.
 239 Burnham St.
 East Hartford, CT 06108

Title: 100 KW RF AMPLIFIER
 Size: Document Number: Q58002101-1
 Date: January 16, 1992 Sheet 1 of 3



- NOTES:
1. L1, L4 - 45 turns AWG 24 Teflon 2" long by .5" diameter
 2. L2 - 6 turns AWG 12 bare 1" long by 1" diameter
 3. L3 - 4 turns AWG .75" long by 1" diameter
 4. L5 - 10 turns AWG 12 heavy enamel on Fair-Rite 3061142001 (125 perm., .5" diameter by 2" long)
 5. L6 - 1 turn AWG 12 bare .4" long by .8" diameter
- * - If Required

- NOTES:
- RESISTORS IN OHMS
 - RESISTORS ARE RMS UNLESS OTHERWISE NOTED
 - CAPACITORS IN pF
 - INDUCTORS IN uH

Source Proprietary

Source, Inc.	
239 Burnham St.	
East Hartford, CT 06108	
Title	100 KM RF Amplifier
Size/Document Number	Q58002101-3
Date:	January 16, 1992/Sheet 3 of 3



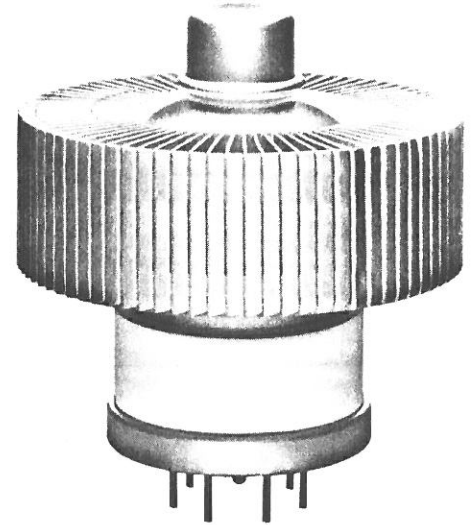
TECHNICAL DATA

HIGH-MU
POWER TRIODE

The EIMAC 3CPX1500A7 is a rugged ceramic/metal high-mu power triode, designed with beam-forming cathode and control-grid geometry to allow the simplicity of design and circuit advantages of a triode with the gain of a tetrode.

The 3CPX1500A7 is intended for pulse modulator or pulse regulator service, with a pulse plate current rating of 50 amperes, and a voltage holdoff rating of 10,000 volts in air, with forced-air cooling of the anode, or 15,000 volts when immersed in a suitable dielectric liquid which is also used for tube cooling.

An Air-System Socket (EIMAC SK-2200) and an Air Chimney (EIMAC SK-2216) are available for those applications requiring forced-air cooling.



GENERAL CHARACTERISTICS¹

ELECTRICAL

Cathode: Oxide Coated, Unipotential

Heater: Voltage	5.5 ± 0.25 V
Current, at 5.5 volts	11.2 A
Transconductance (Average, with I _b = 1.0 Adc)	55,000 μmhos
Amplification Factor (Average)	200
Direct Interelectrode Capacitance (grounded cathode) ²	
C _{in}	38.5 pF
C _{out}	0.1 pF
C _{gp}	10 pF

1. Characteristics and operating values are based upon performance tests. These figures may change without notice as the result of additional data or product refinement. EIMAC Division of Varian should be consulted before using this information for final equipment design.

2. Capacitance values are for a cold tube as measured in a special shielded fixture in accordance with Electronic Industries Association Standard RS-191.

MECHANICAL

Maximum Overall Dimensions:

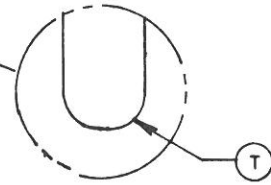
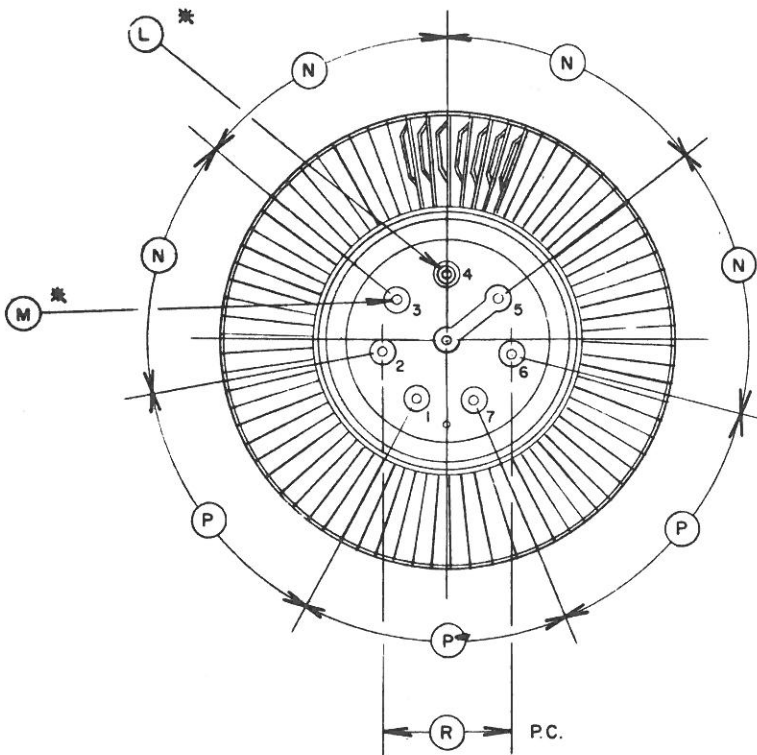
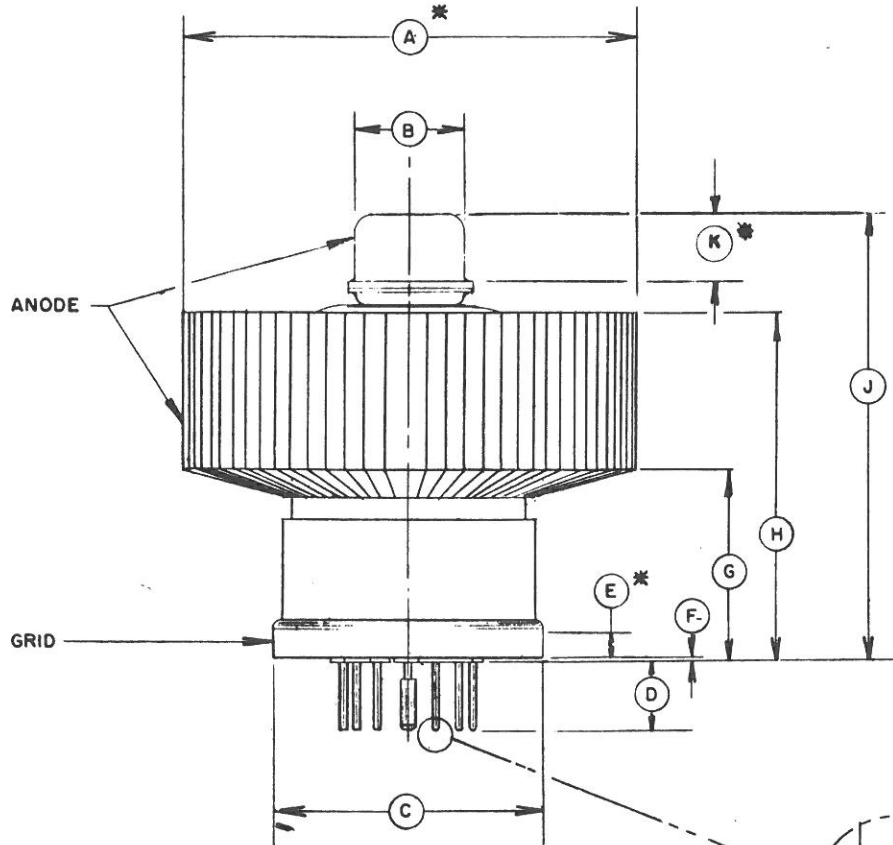
Length	4.02 in; 102 mm
Diameter	3.38 in; 86 mm
Net Weight	26 oz; 735 gm
Operating Position	Any
Maximum Operating Temperature, Ceramic/Metal Seals or Anode Core	250° C
Cooling	Forced Air or Liquid Immersion

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3CPX1500A7



PIN CONNECTIONS

- 1 - HEATER
- 5 - HEATER
- 2 - 3-4-6-7 CATHODE

DIMENSIONAL DATA

DIM	INCHES			MILLIMETERS		
	MIN.	MAX.	REF.	MIN.	MAX.	REF.
A	3.350	3.380	- -	85.09	85.85	- -
B	0.810	0.820	- -	20.57	20.83	- -
C	1.995	2.015	- -	50.67	51.18	- -
D	0.438	0.562	- -	11.13	14.27	- -
E	0.235	- -	- -	5.97	- -	- -
F	0.000	0.040	- -	0.00	1.02	- -
G	1.350	1.475	- -	34.29	37.46	- -
H	2.550	2.675	- -	64.77	67.94	- -
J	3.250	3.420	- -	82.55	86.87	- -
K	0.470	0.530	- -	11.94	13.46	- -
L	0.120	0.127	- -	3.05	3.23	- -
M	0.056	0.062	- -	1.42	1.57	- -
N	- -	- -	51°	- -	- -	51°
P	- -	- -	52°	- -	- -	52°
R	- -	- -	1.000	- -	- -	25.40
T	0020R	- -	- -	0.51 R	- -	- -

NOTES:

1. REF DIMENSIONS ARE FOR INFO ONLY & ARE NOT REQUIRED FOR INSPECTION PURPOSES.
2. * CONTACT SURFACE
3. DIMENSION T APPLIES TO ALL BUT CENTER PIN.