The EIMAC 3CW1500A3 is a medium-mu, water cooled, rugged ceramic/metal power triode intended for use as a power oscillator in industrial heating applications.

GENERAL CHARACTERISTICS

ELECTRICAL

Filament: Thoriated Tungsten

Voltage	7.5 + 0.35v
Current	31 amps
Amplification Factor (Average)	24

Direct Interelectrode Capacitance (Grounded Cathode)[2]

Cin	20.39 pF
Cout	0.89 pF
Cgp	9.03 pF

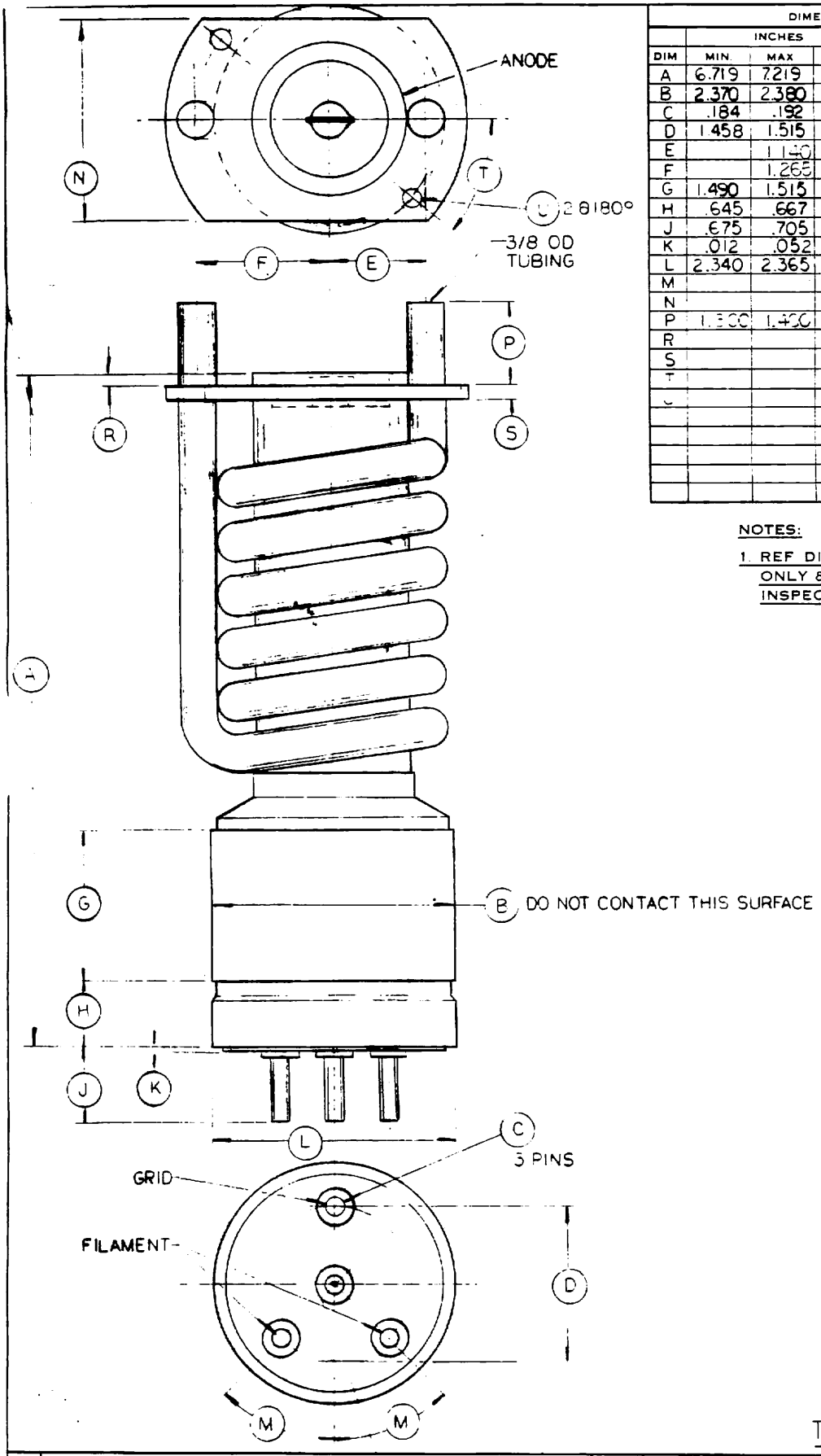
MECHANICAL

Base	3 Pin Special
Mounting Position	Vertical, base down or up
Cooling	Water
Recommended Socket	EIMAC SK-520

Maximum Operating Temperatures:

Plate Seal	250° C
Base Seals	250° C

Effective 1/84



DIMENSIONAL DATA						
	INCHES			MILLIMETERS		
DIM	MIN.	MAX	REF.	MIN.	MAX.	REF.
A	6.719	7.219				
B	2.370	2.380				
C	.184	.192				
D	1.458	1.515				
E		1.140				
F		1.265				
G	1.490	1.515				
H	.645	.667				
J	.675	.705				
K	.012	.052				
L	2.340	2.365				
M			45°			
N			2.000			
P	1.300	1.420				
R			.093			
S			.125			
T			40°			
U			.87			

NOTES:

1. REF DIMENSIONS ARE FOR INFO ONLY & ARE NOT REQUIRED FOR INSPECTION PURPOSES.

TENTATIVE

LTR	DESCRIPTION OF CHANGE	ECO	DATE	BY
A	'P' WAS .800 / .900	FA	9.26.83	BM
B	ADD 'T', 'U'	FA	10.26.83	BM
C	WAS 3CW1000	FA	11.8.83	BM
D	'E' WAS 1.000 / 'F' WAS .375	JA	12.1.83	BM
				/
				/

DRAWN: BM 4-19-83
CHK'D:
ENGR APPR:
SUPERSEDES:
SCALE: NONE

EIMAC, division of varian
San Carlos, California
CODE IDENT No 38594
PART No 3CW1500A3
OUTLINE ELECTRON TUBE

No 3CW1500A3 D

RANGE VALUES FOR EQUIPMENT DESIGN

	Min.	Max.
Heater: Current at 7.5 volts	30	32A
Interelectrode Capacitance (Grounded Cathode Connection)		
Cin	17	23 pF
Cout		1.0 pF
Cgp	8.0	10.0 pF

TYPICAL OPERATION

DC Plate Voltage	5000 volts	6000 volts
DC Plate Current	0.866 amps	0.743 amps
DC Grid Voltage	-400 volts	-400 volts
DC Grid Current	0.140 amps	0.140 amps
Peak Grid Voltage	580 volts	550 volts
Plate Input Power	4330 watts	4450 watts
Plate Dissipation	820 watts	780 watts
Plate Output Power	3510 watts	3670 watts
Approximate Load Impedance	2880 ohms	4120 ohms

NOTE: "TYPICAL OPERATION" data are obtained by calculation from published characteristic curves. No allowance for circuit losses has been made.

ELECTRICAL

RF INDUSTRIAL OSCILLATOR
Class-C (Filtered DC Power Supply)

MAXIMUM RATINGS:

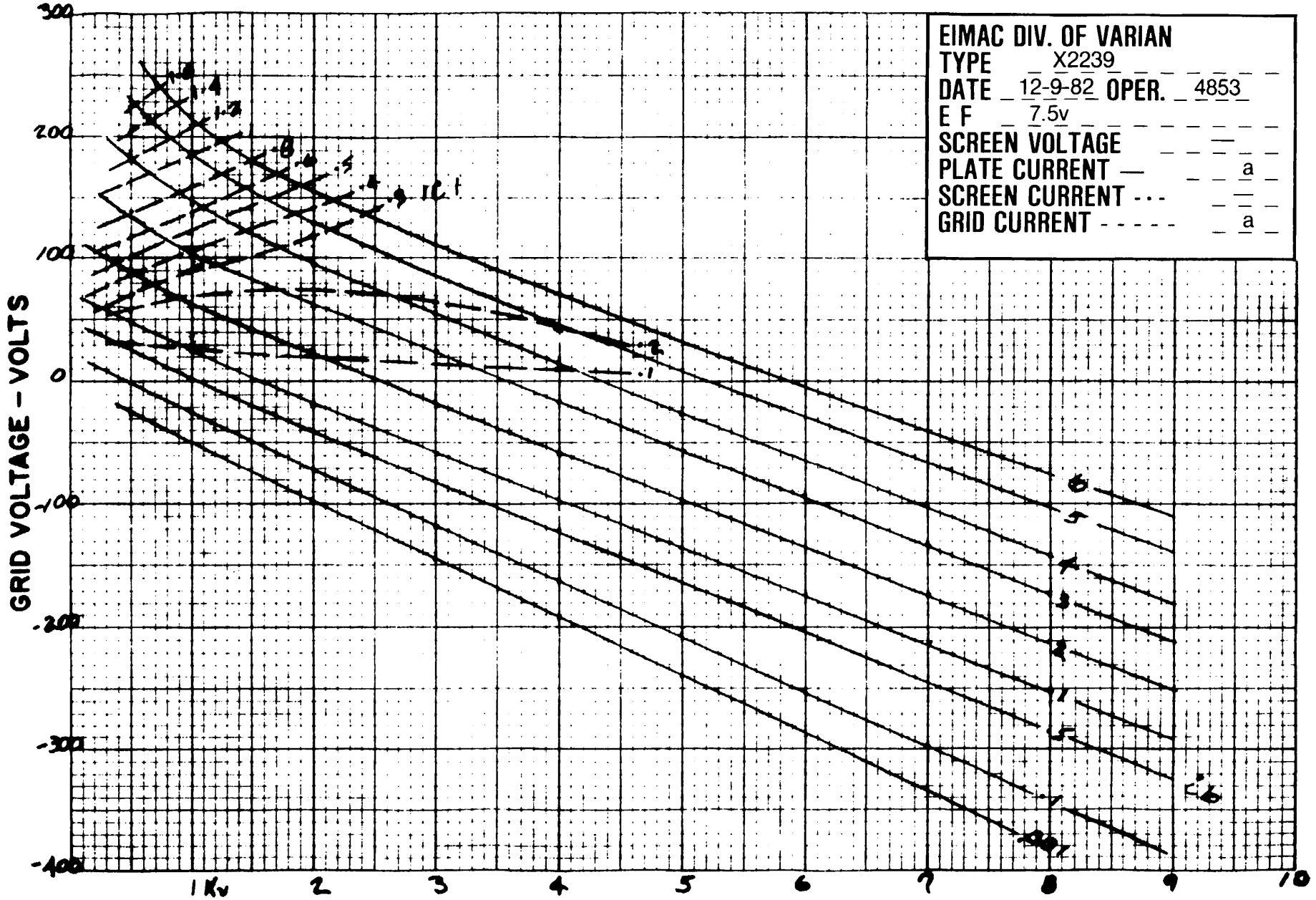
Frequency	110 MHz
DC PLATE VOLTAGE	6000 volts
DC PLATE CURRENT	1.5 amps
GRID DISSIPATION	75 watts
PLATE DISSIPATION	2000 watts

COOLING (WATER COOLED)

Plate Dissipation (Watts)	Water Flow (GPM)	Approximate Pressure Drop (PSI)	Inches in Water
1000	0.19	0.049	0.10
1500	0.28	0.11	0.23
2000	0.38	0.17	0.35

The table above 1 sts minimum water-flow requirements to maintain tube temperatures below 175° C. The table is based upon a water temperature rise of 20° C and inlet temperature of 30° C. A separate air-flow supply of approximately 5 CFM directed into the base is also required to maintain rated filament seal.

GROUNDED CATHODE
CONSTANT CURRENT CHARACTERISTICS



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