

EITEL-McCULLOUGH, INC.

SAN BRUNO, CALIFORNIA

3 C 2 4

MEDIUM-MU TRIODE

MODULATOR
OSCILLATOR
AMPLIFIER

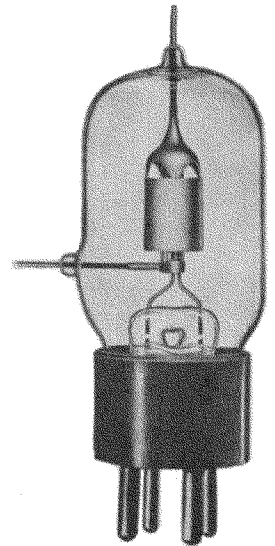
GENERAL CHARACTERISTICS

ELECTRICAL

Filament: Thoriated tungsten	
Voltage - - - - -	6.3 volts
Current - - - - -	3.0 amperes
Amplification Factor (Average) - - - - -	23
Direct Interelectrode Capacitances (Average)	
Grid-Plate - - - - -	1.5 μmf
Grid-Filament - - - - -	1.7 μmf
Plate-Filament - - - - -	0.3 μmf
Transconductance ($I_b=25 \text{ ma.}, E_b=1000, e_c=-20$)	2500 μmhos

MECHANICAL

Base - - - - -	(Small 4-pin bayonet)	RMA type M8-071
Basing - - - - -		RMA type 2D
Maximum Overall Dimensions:		
Length - - - - -		4.38 inches
Diameter - - - - -		1.44 inches
Net weight - - - - -		1.00 ounce
Shipping weight (Average) - - - - -		1.25 pounds



AUDIO FREQUENCY POWER AMPLIFIER AND MODULATOR

Class B

	TYPICAL OPERATION—2 TUBES				MAX. RATING
	750	1000	1500	2000	
D-C Plate Voltage - - - - -	750	1000	1500	2000	2000 volts
Max.-Signal D-C Plate Current, per tube* - -	•	•	•	•	75 ma.
Plate Dissipation, per tube* - - - - -	•	•	•	•	25 watts
D-C Grid Voltage (approx.) - - - - -	-20	-30	-60	-85	volts
Peak A-F Grid Input Voltage - - - - -	230	230	250	290	volts
Zero-Signal D-C Plate Current - - - - -	43	32	21	16	ma.
Max.-Signal D-C Plate Current - - - - -	133	120	94	80	ma.
Max.-Signal Driving Power (approx.) - - - -	2.0	1.7	1.2	1.1	watts
Effective Load, Plate-to-Plate - - - - -	9200	15800	33700	55500	ohms
Max.-Signal Plate Power Output - - - - -	50	70	90	110	watts

*Averaged over any sinusoidal audio frequency cycle.

RADIO FREQUENCY POWER AMPLIFIER AND OSCILLATOR

Class-C *Telegraphy

(Key down conditions without modulation)

	TYPICAL OPERATION—1 TUBE			MAX. RATING
	1000	1500	2000	
D-C Plate Voltage - - - - -	1000	1500	2000	2000 volts
D-C Plate Current - - - - -	72	67	63	75 ma.
D-C Grid Current - - - - -	15	15	17	25 ma.
D-C Grid Voltage - - - - -	-80	-110	-170	volts
Plate Power Output - - - - -	47	75	100	watts
Plate Input - - - - -	72	100	125	watts
Plate Dissipation - - - - -	25	25	25	25 watts
Peak R. F. Grid Input Voltage, (approx.) - -	200	225	295	volts
Driving Power, (approx.) - - - - -	2.6	3.1	4.5	watts

*The above figures show actual measured tube performance, and do not allow for variations in circuit losses.

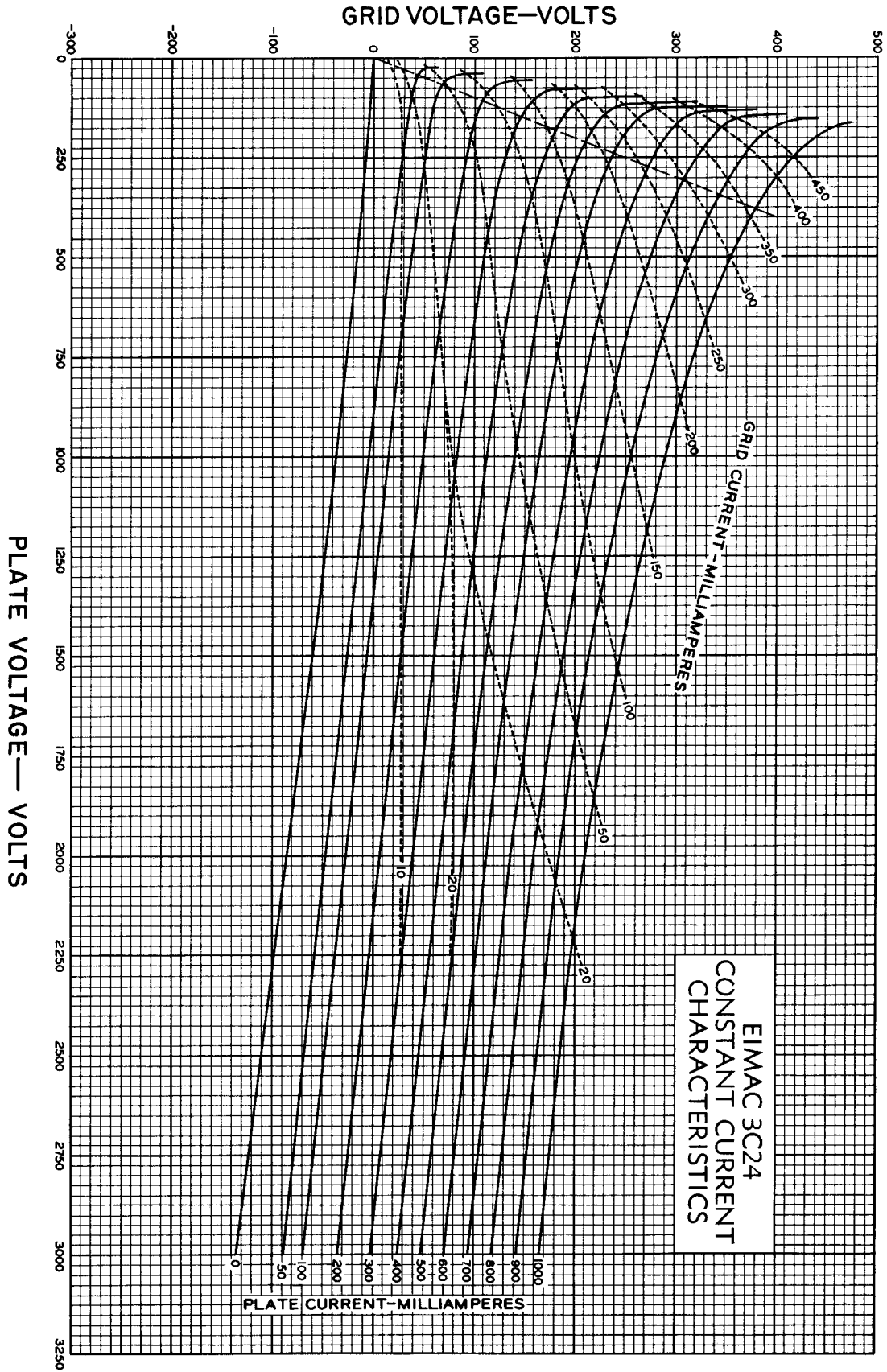


PLATE VOLTAGE— VOLTS

GRID VOLTAGE—VOLTS

GRID CURRENT—MILLIAMPERES

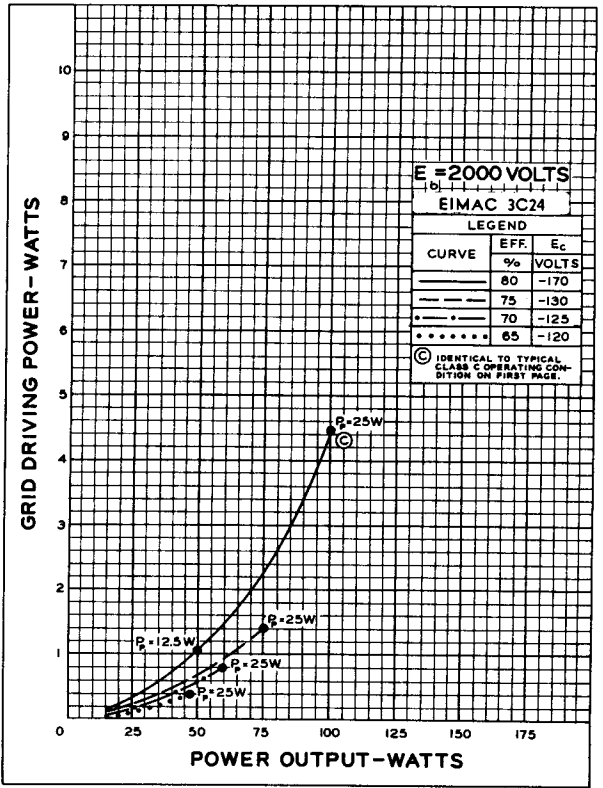
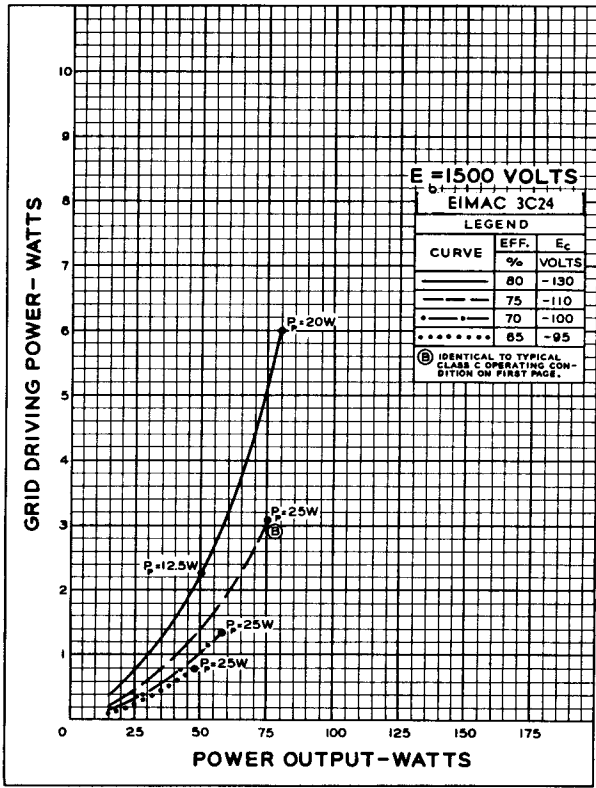
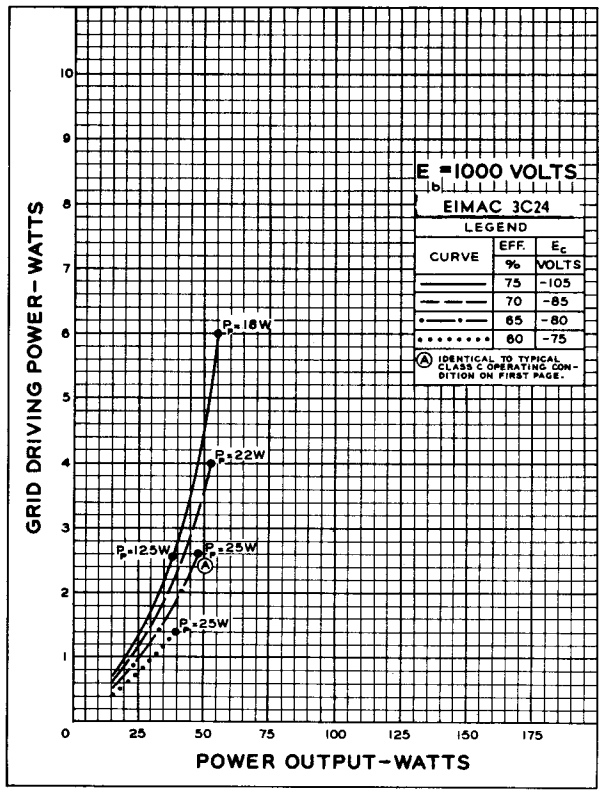
PLATE CURRENT—MILLIAMPERES

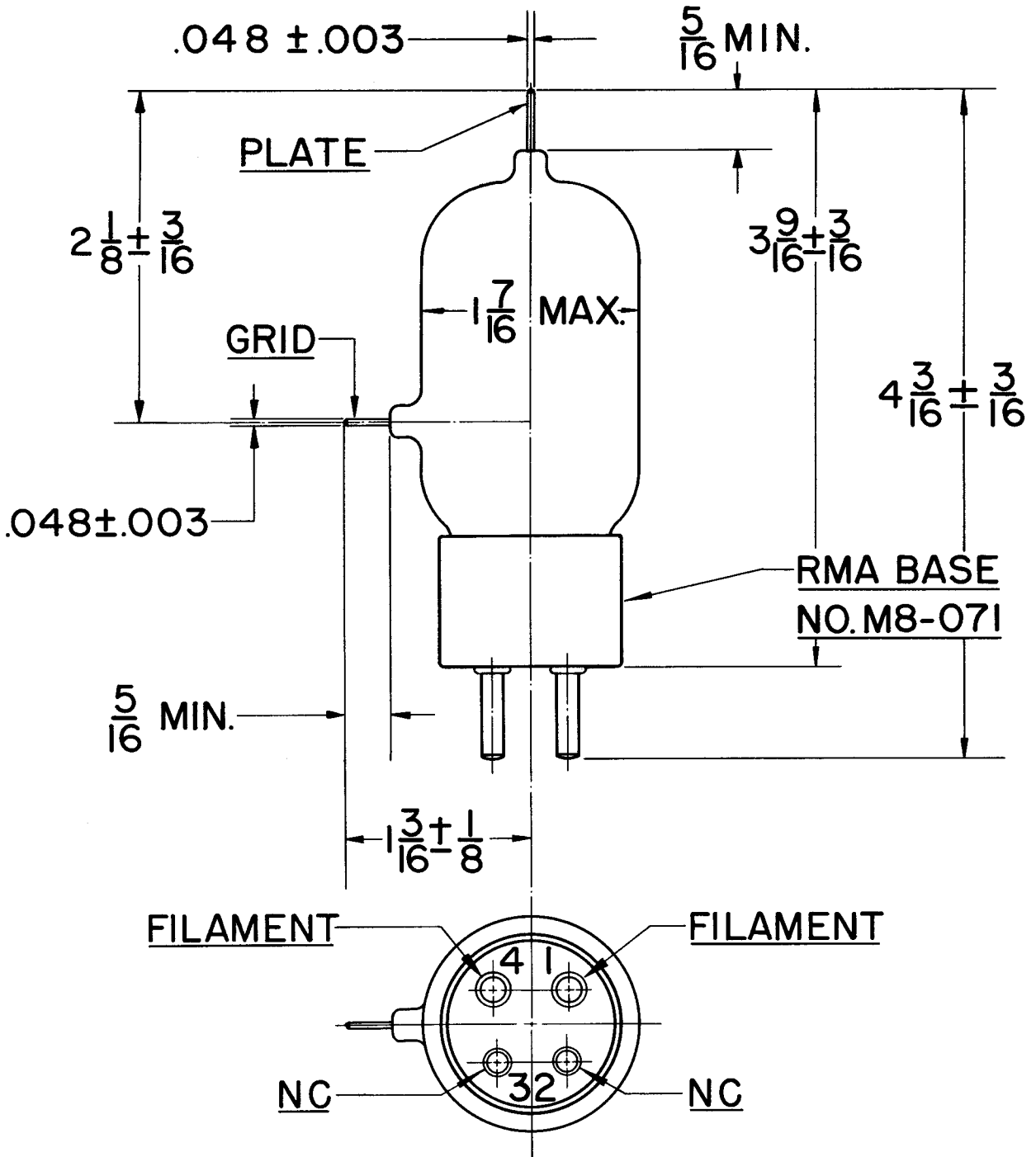
EIMAC 3C24
CONSTANT CURRENT
CHARACTERISTICS

DRIVING POWER vs. POWER OUTPUT

The three charts on this page show the relationship of plate efficiency, power output and grid driving power at plate voltages of 1000, 1500 and 2000 volts. These charts show combined grid and bias losses only. The driving power and power output figures do not include circuit losses. The plate dissipation in watts is indicated by P_p .

Points A, B, and C are identical to the typical Class C operating conditions shown on the first page under 1000, 1500, and 2000 volts respectively.





2D

