

**MECHANICAL DATA**

Base . . . . .	Shortened Octal
Cathode . . . . .	Coated Unipotential
Flanges . . . . .	UG-344/U
Cooling . . . . .	Forced Air, 20 CFM
Weight . . . . .	2 Lbs.
Mounting Position . . . . .	Any

**ELECTRICAL DATA**

**HEATER CHARACTERISTICS**

Heater Voltage ( $\pm 10\%$ ) . . . . .	6.3 Volts
Heater Current . . . . .	2.0 Amperes Nom.

**DIRECT INTERELECTRODE CAPACITANCES**

Gun to Shell . . . . .	8 $\mu\text{f}$ Max.
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**RATINGS (Absolute Values)**

Beam Voltage . . . . .	625 Volts	Max.
Beam Current . . . . .	150 Ma	Max.
Control Electrode Voltage (with Respect to Cathode) . . . . .	0 to -50 Volts	Max.
Control Electrode Current . . . . .	2.0 Ma	Max.
DC Beam Power Input . . . . .	100 Watts	Max.
Operating Temperature		
Shell . . . . .	100°C	Max.
Base . . . . .	75°C	Max.
Tuning Range . . . . .	5900 to 6450 Mc	Max.

**CHARACTERISTICS**

Output Resonator Bandwidth . . . . .	>	25 Mc
Output Resonator VSWR . . . . .	<	2
Buncher Resonator Bandwidth . . . . .	>	15 Mc
Buncher Resonator VSWR . . . . .	<	2
Power Output (Amplifier) . . . . .		6 to 9 Watts

**TYPICAL OPERATION**

Resonator Voltage . . . . .	500	600 Volts dc
Control Electrode Voltage . . . . .	0	0
Beam Current . . . . .	100	130 Ma dc

**Amplifier Service**

Input Drive Frequency . . . . .	6175	6175 Mc
Output Frequency . . . . .	6175	6175 Mc
R F Power Input . . . . .	.6	1.0 Watts
R F Power Output . . . . .	4.0	8.0 Watts

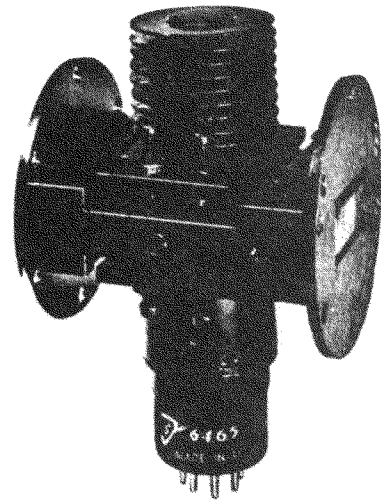
**Synchrodyne Operation**

Input Drive Frequency . . . . .	6175 Mc
Electron Gun Modulation Frequency . . . . .	115 Mc
Electron Gun Modulation Voltage . . . . .	55 Volts rms
Synchrodyne Output Frequency . . . . .	6060 or 6290 Mc
Synchrodyne R F Power Output . . . . .	1.25 Watts

**QUICK REFERENCE DATA**

The Sylvania Type 6465 is a 5950 to 6400 Mc klystron amplifier with two built-in cavities. It will provide 6-9 watts output over the specified operating range.

The 6465 was formally designated K-484.



**SYLVANIA ELECTRIC  
PRODUCTS INC.**

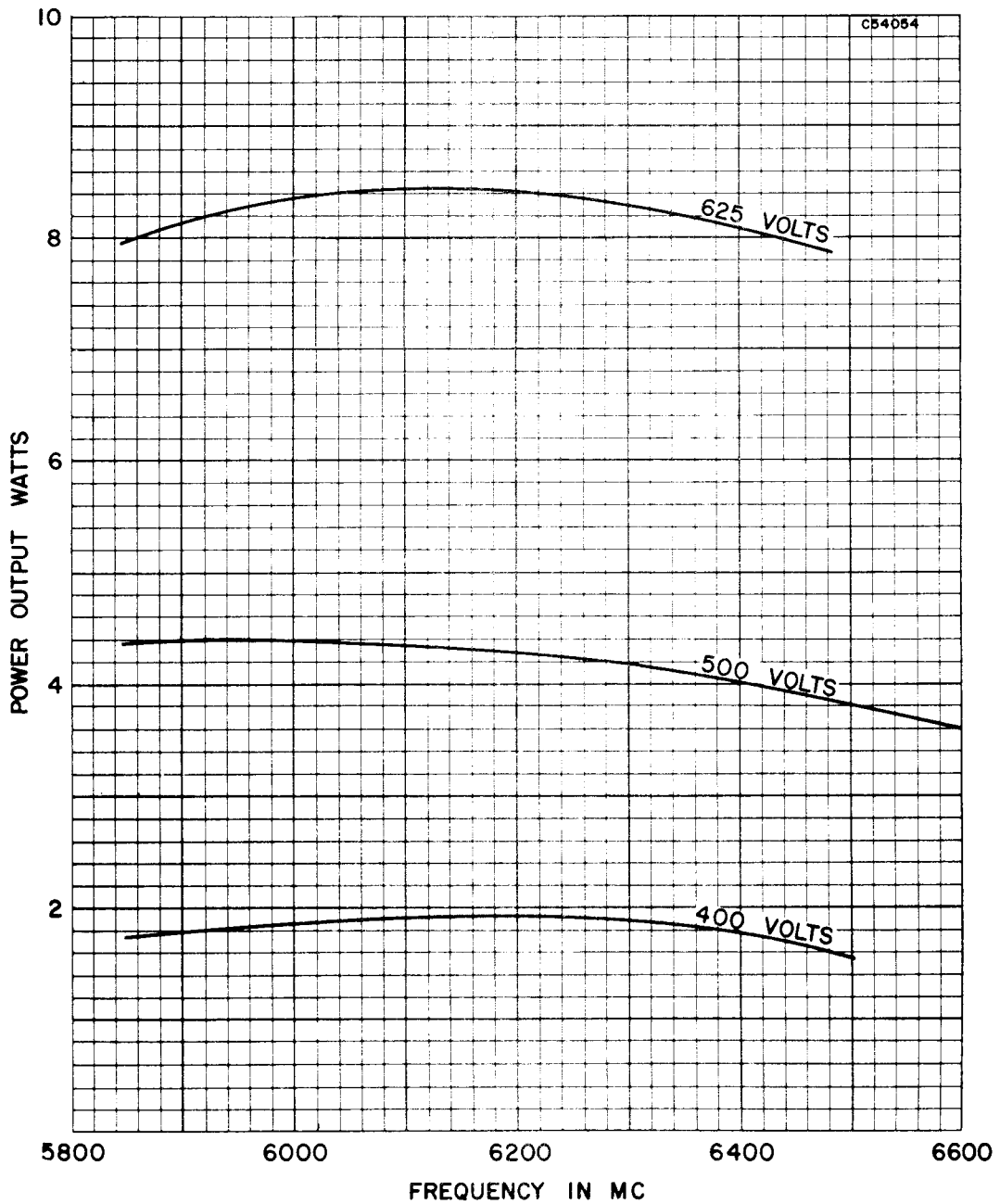
**ELECTRONICS DIVISION  
WOBURN, MASS.**

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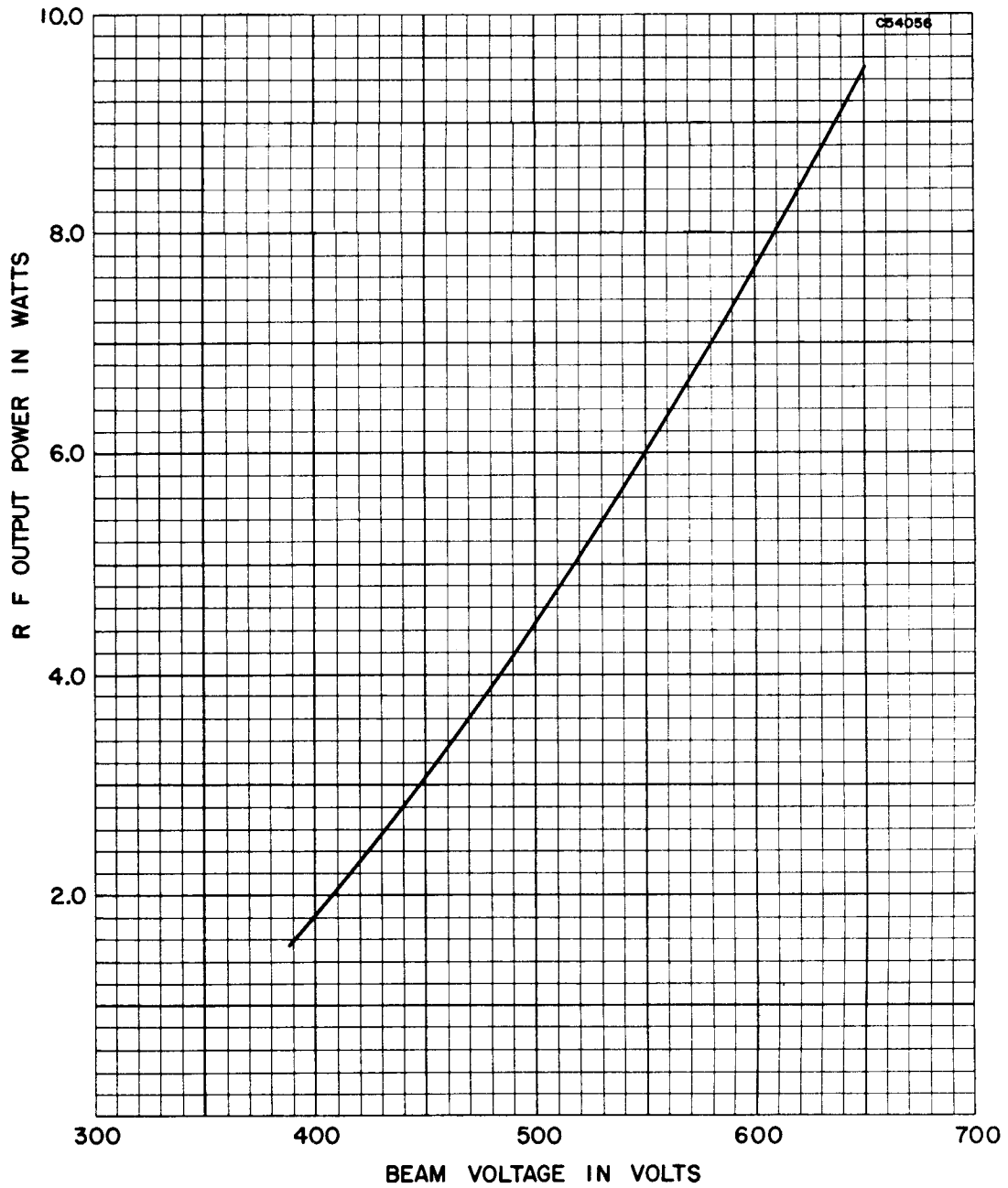
APPLICATION DATA

The Type 6465 klystron amplifier is designed for CW service as master oscillator, power amplifier, or synchrodyne mixer in studio television relay link or similar services. It features two independently tuned integral cavities. Usable with lower output outside the specified frequency range.

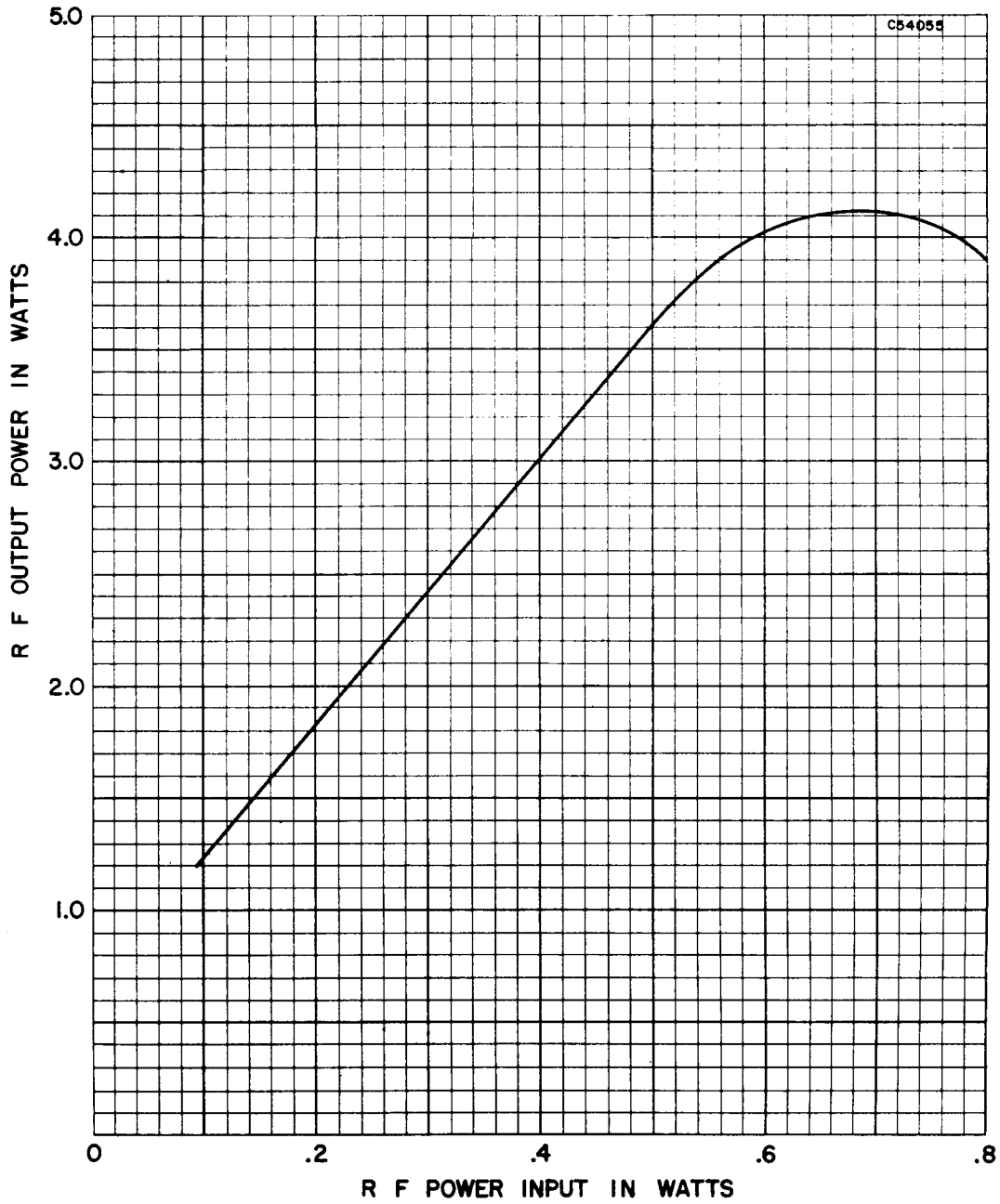
AVERAGE CHARACTERISTICS  
POWER OUTPUT VS BEAM VOLTAGE



AVERAGE CHARACTERISTICS.  
RF OUTPUT POWER VS BEAM VOLTAGE  
(AMPLIFIER OPERATION)



AVERAGE CHARACTERISTICS  
RF POWER OUTPUT VS RF POWER INPUT



AVERAGE CHARACTERISTICS  
POWER OUTPUT VS SYNCRO DRIVE VOLTAGE

