

HYGRADE SYLVANIA CORPORATION

SYLVANIA TYPE 3Q5G

Beam Power Amplifier

#239

E. I. A.
REGISTRATION
FILE

Physical Specifications

Coated Filament with Center Tap Connected to Pin #8

Base

Small Shell Octal 7-Pin

Bulb

T-9

Maximum Diameter

1 3/16"

Maximum Overall Length

4"

Maximum Seated Height

3 7/16"

Pin Connections

RMA Basing No. 7AQ-0-0

Pin 1 - No Connection

Pin 5 - Grid #1 (Control)

Pin 2 - Positive Filament

Pin 7 - Negative Filament (Series)

Pin 3 - Plate

Pin 8 - Negative Filament (Parallel) / Beam Plates

Pin 4 - Grid #2 (Screen)

Mounting Position

Any

Ratings

Series-	Parallel--	
Filament	Filament	

Maximum Filament Voltage Range

Battery Operation - Voltage Must Never Exceed

3.2

1.6

Volts

AC/DC Power Line Operation - Design Center**

2.6

1.3

volts

Maximum Plate Voltage

110

110

volts

Maximum Screen Voltage

110

110

volts

Maximum Cathode Current

6#

12

ma

For each 1.4 volt section of the filament.

Typical Operating Conditions and Characteristics Amplifier Class A₁

	Series-	Parallel-	
	Filament	Filament	
Filament Voltage	2.8 dc	1.4 dc	volts
Filament Current	0.050	0.100	amp
Plate Voltage	90	90	volts
Screen Voltage	90	90	volts
Grid Voltage	-4.5	-4.5	volts
Peak Signal Voltage	4.5	4.5	volts
Plate Current	7.5	9.5	ma
Screen Current	1.0	1.6	ma
Transconductance	1800	2100	umhos
Plate Resistance (approx.)	0.1	0.1	megohm
Load Resistance	8000	8000	ohms
Total Harmonic Distortion	7.5	7.5	%
Power Output	250	270	milliwatts

* For Parallel Filament Operation connect Pins #2 and #7 to positive voltage supply and Pin #8 to negative voltage supply.

** The voltage across each 1.4 volt filament, or 1.4 volt section of filament must range between 1.25 and 1.40 volts when operating at the normal line voltage of 117 volts. These voltages must be in effect for each supply voltage for which the set is rated.

For interpretation of ratings, refer to Receiving Tube Rating Sheet.

4-1-40