

#239

HYGRADE SYLVANIA CORPORATION

SYLVANIA TYPE 3Q5G

Beam Power Amplifier



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- Filament	Parallel- 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- Filament	Parallel- 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.