RMA Release # 231 Feb. 2, 1940

HYGRADE SYLVANIA CORPORATION

TECHNICAL DATA

SYLVANIA TYPE 50Y6G

High-Vacuum Rectifier-Doubler

Physical Specifications

Coated Unipotential Cathode	
Base	Small Shell Octal 7-Pin
Bulb	ST-12
Maximum Diameter	1 9/16"
Maximum Overall Length	4 1/8"
Maximum Seated Height	3 9/16"
Pin Connections	Basing No. 7Q

Pin 1 - No Connection
Pin 2 - Heater
Pin 3 - Plate #2
Pin 4 - Cathode #2
Pin 5 - Plate #1
Pin 7 - Heater
Pin 8 - Cathode #1

Mounting Position — Any

Ratings

Heater Voltage (ac or dc)	50	volts
Heater Current	0.15	amp
Maximum AC Voltage per plate (RMS)	235	volts
Maximum DC Heater to Cathode Potential	350	volts
Maximum Peak Inverse Voltage	700	volts
Maximum Steady-State Peak Plate Current per Plate	450	ma
DC Voltage Drop per plate at 150 ma	22	volts

Typical Operating Conditions

Voltage Doubler

	Half-Wave	Full-Wave	
Heater Voltage	50	50	volts
AC Voltage per Plate (RMS)	117 Max	117 Max	volts
DC Output Current per Plate	75 Max	75 Max	ma
Minimum Total Effective Plate Supply Impedance per Plate #	30	15	ohms

Half-Wave Rectifier

Heater Voltage	50	50	50	volts
AC Voltage per Plate (RMS)	117	150	235 Max	volts
DC Output Current per Plate	75 Max	75 Max	75 Max	ma
Minimum Total Effective Plate Supply Impedance per Plate #	15	40	100	ohms

#When filter condensers larger than 40 mfds are used, it may be necessary to add additional plate supply impedance.

1-29-40