

Sylvania

# TYPE 25Z6

## HIGH VACUUM RECTIFIER AND VOLTAGE DOUBLER



### CHARACTERISTICS

Heater Voltage AC or DC . . . . .	25.0 Volts
Heater Current . . . . .	0.3 Ampere
Maximum Over-all Length . . . . .	3 1/4"
Maximum Diameter . . . . .	1 1/8"
Base—Small Octal 7-Pin . . . . .	7-Q

### Operating Conditions and Characteristics:

#### VOLTAGE DOUBLER

Heater Voltage . . . . .	25.0 Volts
A-C Plate Voltage per Plate (RMS) . . . . .	125 Volts Max.
Peak Plate Current per Plate . . . . .	500 Ma. Max.
D-C Output Current . . . . .	85 Ma. Max.

#### HALF-WAVE RECTIFIER

	Without Series Resistor	With Series Resistor†
Heater Voltage . . . . .	25.0	25.0 Volts
A-C Plate Voltage per Plate (RMS) . . . . .	125	250 Volts Max.
Peak Plate Current per Plate . . . . .	500	500 Ma. Max.
D-C Output Current per Plate . . . . .	85	85 Ma. Max.

†Use of an a-c input voltage in excess of 125 volts requires 100 ohm resistors in series with each plate. A 100 ohm resistor common to both plates may be employed although poorer regulation is obtained.

NOTE: For rectifier curve data see Page 154.

### CIRCUIT APPLICATION

Sylvania 25Z6 is the metal tube equivalent of Sylvania Type 25Z5. Its design makes the tube applicable in half-wave circuits or as a voltage doubling device and hence is particularly adapted for service in transformerless receivers.

When used in a "universal" type receiver the heater is connected in series with the heaters of the other tubes in the set. The 25 volt rating is an economical feature since it reduces the amount of heat to be dissipated in the fixed series resistor of the heater circuit.

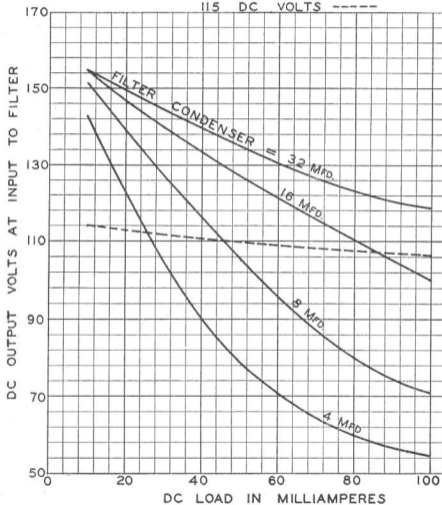
For half-wave circuit operation, it is necessary to connect the two plates together at the socket and, likewise, to tie the two cathodes so as to form a single element. A condenser-input filter is essential in order to obtain satisfactory d-c output voltages. The recommended capacitance is 16 microfarads.

Reference may be made to the curve data on Type 25Z5 as shown on Page 154 which is applicable to the 25Z6. However, it should be borne in mind that the maximum d-c output current for the metal type is 85 milliamperes as compared with 100 milliamperes for Type 25Z5.

A discussion covering the operation as a voltage doubling device is given on Page 74.

# TYPES 25Z5, 25Z6, 25Z6G

$E_f = 25$  VOLTS  
 HALF WAVE  
 115 RMS VOLTS ———  
 115 DC VOLTS - - - -



# TYPES 25Z5, 25Z6, 25Z6G

$E_f = 25$  VOLTS  
VOLTAGE DOUBLER  
115 RMS VOLTS

