SYLVANIA TYPE 6BW4 12BW4
FULL WAVE RECTIFIER

MECHANICAL DATA
Bulb.................................................. T-6½
Base................................................ E9-1 Miniature Button, 9-Pin
Outline.............................................. 6-3
Basing.............................................. 9DJ
Cathode............................................. Coated Unipotential
Mounting Position.............................. Any

ELECTRICAL DATA
HEATER CHARACTERISTICS
6BW4 12BW4
Heater Voltage1 A C or D C.......................... 6.3 12.6 Volts
Heater Current..................................... 900 450 Ma
Maximum Heater Cathode Voltage
Heater Negative, D C.............................. 450 450 Volts

MAXIMUM RATINGS (Design Center Values)1
Rectifier Service
Peak Inverse Plate Voltage........................ 1275 Volts
A C Plate Supply Voltage Each Plate, R M S
(See Rating Chart I).................................. 450 Volts
D C Output Current,.................. See Rating Chart 1
Steady State Peak Plate Current Each Plate
(See Rating Chart II)............................... 350 Ma
Transient Peak Plate Current Each Plate
(See Rating Chart III).............................. 2.0 Amperes

AVERAGE CHARACTERISTICS
Tube Voltage Drop
Tube Conducting:
100 Ma Each Plate................................. 40 Volts

TYPICAL OPERATION
Full Wave Rectifier—Capacitor Input Filter
A C Plate Supply Voltage Each Plate, R M S1 325 Volts
Filter Input Capacitor............................. 40 μF
Effective Plate Supply Resistance, Each Plate. 82 Ohms
D C Output Current.................................. 100 Ma
D C Output Voltage at Filter Input................ 330 Volts

Full Wave Rectifier—Choke Input Filter
A C Plate Supply Voltage Each Plate, R M S1 450 Volts
Filter Input Choke................................. 10 Henrys
D C Output Current................................. 100 Ma
D C Output Voltage at Filter Input................ 360 Volts

NOTES:
1. See "Interpretation of Rating Charts."
2. A C plate voltage is measured without load.
3. The 12BW4 is intended to be used in automotive service from a nominal 12 volt battery source. The heater is therefore designed to operate over the 10.0 to 15.9 voltage range encountered in this type of service. The maximum ratings of the tube provide for an adequate safety factor such that the tube will withstand the wide variation in supply voltages.

APPLICATION
The Sylvania 6BW4 and 12BW4 are miniature cathode type full wave rectifiers featuring relatively high output current capabilities. The 12BW4 is intended primarily for use in auto receivers having a 12 volt heater supply.