

TUNG-SOL

PRODUCT BULLETIN

**INDUSTRIAL
ELECTRON
TUBE
TYPE 8376**
MARCH, 1964

CERAMIC HYDROGEN DIODE

DESCRIPTION—The 8376 is a ceramic, indirectly heated hydrogen-filled diode designed for use in high-voltage rectifier applications. Incorporated in the tube is a reservoir that promotes stable operation and long life by maintaining a constant hydrogen pressure.

Contrasted with a solid-state rectifier, the tube can withstand high current and high inverse voltage surges. They also have the advantage of being free of the temperature and mounting restrictions of mercury vapor tubes.



See Page 2
For Outline
Drawing

ELECTRICAL DATA

	Min	Bogey	Max	
Heater and Reservoir Voltage (Note 1)	4.75	5.00	5.25	Volts
Heater Current (Note 2)	12	—	15	Amperes
Reservoir Current (Note 2)	2	—	3	Amperes
Cathode and Reservoir Heating Time	3	—	—	Minutes
Tube Voltage Drop	—	—	70	Volts
Initial Firing Voltage	—	—	100	Volts
Recurrent Firing Voltage	—	—	60	Volts
Ambient Temperature	-55	—	+150	Degrees Centigrade
Envelope Temperature	—	—	400	Degrees Centigrade

NOTES:

1. The bogey reservoir voltage for externally connected reservoir is 5 volts. This may be obtained by connecting the reservoir in parallel with the cathode heater.
2. Heater and reservoir currents at bogey heater and reservoir voltage.

MECHANICAL DATA

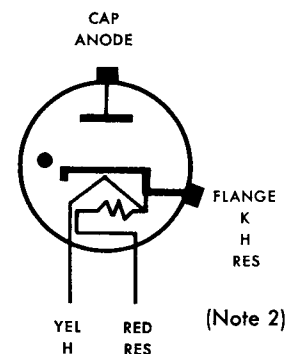
Type of Cooling	Convection or forced air
Mounting Position	Horizontal or vertical with base down
Maximum Net Weight	3 Pounds
Dimensions, Mounting and Terminals	See Drawings

MAXIMUM RATINGS, ABSOLUTE VALUES RECTIFIER SERVICE

Anode Voltage — Peak	
Inverse — See Rating Graph on page 2	25 Kilovolts
Anode Current	
Peak	12 Amperes
Average — See Rating Graph on page 2	3 Amperes
Fault — Maximum Duration 0.1 Second	90 Amperes

NOTES:

1. See Rectifier Rating Graph on page 2.
2. **CAUTION** — In order to avoid damage to tube, the cathode connection must be made to the base flange only.



BASING DIAGRAM

RECTIFIER RATING GRAPH

