The 1X2-B is a miniature filamentary diode designed for use in television receivers as the high-voltage rectifier to supply power to the anode of the television picture tube. The 1X2-B is intended primarily for use in fly-back types of power supplies. Except for increased peak inverse voltage ratings, the 1X2-B is identical to the 1X2-A.

**GENERAL**

**ELECTRICAL**
- Cathode—Coated Filament
- Filament Voltage, AC or DC: 1.25* Volts
- Filament Current: 0.2 Amperes
- Direct Interelectrode Capacitances, approximate†
  - Plate to Filament: 1.0 μuf

**MECHANICAL**
- Mounting Position—Any
- Envelope—T-6½, Glass
- Base—E9-1, Miniature Button 9-Pin
- Top Cap—C1-2 or C1-33, Skirted Miniature

**MAXIMUM RATINGS**

**FLYBACK RECTIFIER SERVICE‡**

**DESIGN-CENTER VALUES UNLESS OTHERWISE INDICATED**

- Peak Inverse Plate Voltage
  - DC Component: 18000 Volts
  - Total DC and Peak: 22000π Volts
- Steady-State Peak Plate Current: 45 Milliamperes
- DC Output Current: 0.5 Milliamperes

**AVERAGE CHARACTERISTICS**

- Tube Voltage Drop, approximate
  - 1fb = 7.0 Milliamperes DC: 100 Volts

**PHYSICAL DIMENSIONS**

[Physical dimensions diagram]
* Under no circumstances should the filament voltage be less than 1.05 volts or more than 1.45 volts.

† Without external shield.

§ For operation in a 525-line, 30-frame television system as described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission. The duty cycle of the voltage pulse must not exceed 15 percent of one scanning cycle.

› Value given is to be considered as an Absolute Maximum Rating. In this case, the combined effect of supply voltage variation, manufacturing variation including components in the equipment, and adjustment controls should not cause the rated value to be exceeded.

Note: The voltages employed in some television receivers and other high-voltage equipment are sufficiently high that high-voltage rectifier tubes may produce soft x-rays which can constitute a health hazard unless such tubes are adequately shielded. The need for this precaution should be considered in equipment design. Relatively simple shielding should prove adequate.

![Average Plate Characteristics Graph]