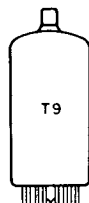
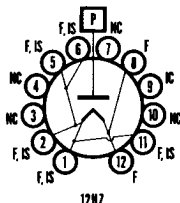


**1BY2**

Color Television Type  
**HIGH VOLTAGE RECTIFIER**

**Filamentary Diode**

|                              |               |
|------------------------------|---------------|
| Construction .....           | T-9           |
| Base .....                   | E12-70        |
| Top Cap .....                | C1-1 or C1-34 |
| Basing <sup>(3)</sup> .....  | 12HZ          |
| Outline .....                | 9-98          |
| Maximum Diameter .....       | 1.188 In.     |
| Maximum Seated Height .....  | 2.750 In.     |
| Maximum Overall Height ..... | 3.125 In.     |

**ELECTRICAL DATA****FILAMENT OPERATION**

|                                       |            |
|---------------------------------------|------------|
| Filament Voltage <sup>(1)</sup> ..... | 1.25 Volts |
| Filament Current .....                | 200 Ma     |

**DIRECT INTERELECTRODE CAPACITANCES**

|                                             |                          |
|---------------------------------------------|--------------------------|
| Plate to Filament and Internal Shield ..... | Without Shield<br>1.6 pf |
|---------------------------------------------|--------------------------|

**RATINGS (Design Maximum Rating System)****Pulse Rectifier Service<sup>(2)</sup>****Peak Inverse Plate Voltage**

|                                                       |              |
|-------------------------------------------------------|--------------|
| Total DC and Peak (Absolute Max.) .....               | 26,000 Volts |
| DC Component (Absolute Max.) .....                    | 22,000 Volts |
| Steady State Peak Plate Current (Design Max.) .....   | 50 Ma        |
| Average Plate Current (DC Output) (Design Max.) ..... | 0.5 Ma       |

**AVERAGE CHARACTERISTICS**

|                                                            |           |
|------------------------------------------------------------|-----------|
| Instantaneous Tube Drop (Approx.) for $I_b = 7.0$ Ma ..... | 225 Volts |
|------------------------------------------------------------|-----------|

**X-RADIATION CHARACTERISTICS**

Maximum X-Radiation ..... 25.0 mR/h  
 X-Radiation is measured in accordance with JEDEC Publication No. 67, "Recommended Practice for Measurement of X-Radiation from Receiving Tubes," dated February 1968 and quality controlled in accordance with JEDEC Publication No. 73, "Recommended Practice for Quality Control of X-Radiation Emitted from High Voltage Rectifier and Shunt Regulator Receiving Tubes."

Lot acceptance sampling procedures for the manufacturer's initial and life tests for X-Radiation are based upon MIL-STD-105, "Military Standard Sampling Procedures and Tables for Inspection by Attributes." Lot acceptance and life control limits are established substantially below the X-Radiation Characteristic Maximum.

**NOTES:**

- (1) Under no circumstances should voltage fall below 1.05 volts or exceed 1.45 volts.
- (2) For operation in a 525 line, 30-frame system as described in "Standards of Good Engineering Practice for Television Broadcast Stations; Federal Communications Commission;" the duty cycle of the voltage pulse must not exceed 15% of one horizontal scanning cycle.
- (3) Only pins 4 and 10 may be used as tie points at or near filament potential. Pins 3, 7 and 9 are not to be used as tie points for external components. Pins 1 and 2 are to be utilized as the high voltage output filament terminal. Pins 8 or 12 are to be utilized as the low side filament terminal. Good high voltage practice dictates that a minimum of one half inch be maintained between the tube envelope and the filament and/or DC output leads.

**X-RADIATION WARNING:** The high voltages associated with this tube type result in the production of X-radiation which may constitute a health hazard on prolonged exposure at close range unless the tube is adequately shielded. Precautions must be exercised during the servicing of equipment to assure that all shielding components are replaced to their intended positions before the equipment is operated.