THE 1X2A IS A FILAMENTARY DIODE USING THE MINIATURE CONSTRUCTION. IT IS ELECTRICALLY EQUIVALENT TO THE 1X2 BUT IT HAS HIGHER RATINGS THAN THE 1X2. IT IS DESIGNED FOR USE IN TELEVISION SETS AS A HIGH VOLTAGE RECTIFIER TO SUPPLY POWER TO THE ANODE OF THE PICTURE TUBE. IT CAN BE USED IN BOTH RF AND FLY-BACK TYPES OF POWER SUPPLIES AND AT POWER LINE FREQUENCY. IN NEW EQUIPMENT APPLICATIONS THE 1X2A, WHEN USED WITHIN ITS MAXIMUM RATINGS, IS A REPLACEMENT FOR TYPE 1835T AT DC OUTPUT POTENTIALS AS HIGH AS 14 TO 15 KILOVOLTS.

**RATINGS**

**ABSOLUTE MAXIMUM VALUES**

- **FILAMENT VOLTAGE**: 1.25 VOLTS
- **MAXIMUM PEAK INVERSE PLATE VOLTAGE**: 20,000 VOLTS
- **MAXIMUM PEAK PLATE CURRENT**: 11 MA.
- **MAXIMUM DC LOAD CURRENT**: 1.1 MA.

**TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS**

**FLY-BACK PULSE RECTIFIER**

- **FILAMENT VOLTAGE**: 1.25 VOLTS
- **FILAMENT CURRENT**: 200 MA.
- **POSITIVE PULSE PLATE VOLTAGE**: 14 KV.
- **NEGATIVE PULSE PLATE VOLTAGE**: 3.5 KV.
- **PEAK INVERSE PLATE VOLTAGE**: 17.5 KV.
- **DC OUTPUT VOLTAGE (APPROX.)**: 14 KV.
- **DC OUTPUT CURRENT**: 175 MA.

**C** AT 117 VOLT LINE AND NORMAL PICTURE-VIEWING CONDITIONS, IN LABORATORY SET-UP, THE VALUE MAY BE CHECKED USING THERMAL WILLIAM METER WITH THE CIRCUIT Set ADJUSTED TO GIVE THE SAME CURRENT AS WITH 1.25 VOLTS AC OR DC ON THE FILAMENT OF THE TUBE. SUITABLE ACCOUNT SHOULD BE TAKEN OF INTERNAL RESISTANCE OF THE THERMAL METER.