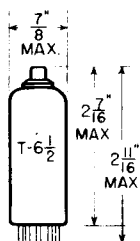


TUNG-SOL

DIODE

MINIATURE TYPE



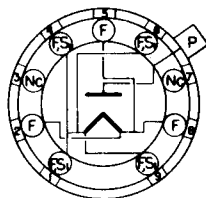
GLASS BULB

COATED FILAMENT

1.25 VOLTS 200 MA.

AC OR DC

ANY MOUNTING POSITION


 BOTTOM VIEW
 MINIATURE BUTTON
 9 PIN BASE

9Y

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 1B3GT AT DC OUTPUT POTENTIALS AS HIGH AS 14 TO 15 KILOVOLTS.

RATINGS

ABSOLUTE MAXIMUM VALUES^A

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.

^A ABSOLUTE MAXIMUM RATINGS ARE THE LIMITING VALUES ABOVE WHICH THE SERVICEABILITY OF THE TUBE MAY BE IMPAIRED FROM THE VIEWPOINT OF LIFE AND SATISFACTORY PERFORMANCE. THEREFORE, IN ORDER NOT TO EXCEED THESE ABSOLUTE RATINGS, THE EQUIPMENT DESIGNER HAS THE RESPONSIBILITY OF DETERMINING AN AVERAGE DESIGN VALUE FOR EACH RATING BELOW THE ABSOLUTE VALUE OF THAT RATING BY AN AMOUNT SUCH THAT THE ABSOLUTE VALUES WILL NEVER BE EXCEEDED UNDER ANY USUAL CONDITION OF LINE VOLTAGE, VARIATION MANUFACTURING VARIATIONS (INCLUDING COMPONENTS) IN THE EQUIPMENT ITSELF, OR ADJUSTMENTS OF CONTROLS.

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

FLY-BACK PULSE RECTIFIER^B

FILAMENT VOLTAGE ^C	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	μA.

^B SEE FOLLOWING PAGE FOR TYPICAL CIRCUIT.

^C AT 117 VOLT LINE AND NORMAL PICTURE-VIEWING CONDITIONS. IN LABORATORY SET-UP, THE VALUE MAY BE CHECKED USING THERMAL MILLIAMETER WITH THE CIRCUIT SO 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.

