DIODE
MINIATURE TYPE

COATED UNIPOTENTIAL CATHODE
HEATER
1.4 VOLTS 0.55 AMP.
AC OR DC
ANY MOUNTING POSITION

*SOCKET TERMINALS 3 & 7 MAY BE USED AS TIE POINTS FOR COMPONENTS AT OR NEAR FILAMENT POTENTIAL.

BOTTOM VIEW
SMALL BUTTON
9 PIN BASE
9LX

GLASS BULB
TOP CAP-MINIATURE

THE 1H2 IS A MINIATURE HEATER-CATHODE TYPE DIODE DESIGNED FOR USE IN TELEVISION RECEIVERS AS THE HIGH-VOLTAGE RECTIFIER TO SUPPLY POWER TO THE ANODE OF THE TELEVISION PICTURE TUBE. THE 1H2 IS PRIMARILY INTENDED FOR USE IN FLY-BACK TYPES OF POWER SUPPLIES.

DIRECT INTERELECTRODE CAPACITANCES - APPROX.
WITHOUT EXTERNAL SHIELD

PLATE TO HEATER, CATHODE & INTERNAL SHIELD
1.0 µµµF

RATINGS
INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM
FLYBACK RECTIFIER SERVICE

HEATER VOLTAGE
1.4 VOLTS
MAXIMUM PEAK INVERSE PLATE VOLTAGE
DC COMPONENT
24 000 VOLTS
TOTAL DC AND PEAK
30 000 VOLTS
MAXIMUM STEADY-STATE PEAK PLATE CURRENT
50 MA.
MAXIMUM DC OUTPUT CURRENT
0.5 MA.

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS
AVERAGE CHARACTERISTICS

TUBE VOLTAGE DROP (APPROX.)
I_b = 7.0 MA.
100 VOLTS

CONTINUED ON FOLLOWING PAGE

*INDICATES AN ADDITION.
DESIGN-MAXIMUM RATINGS ARE LIMITING VALUES OF OPERATING AND ENVIRONMENTAL CONDITIONS APPLICABLE TO A BOGEY ELECTRON DEVICE OF A SPECIFIED TYPE AS DEFINED BY ITS PUBLISHED DATA, AND SHOULD NOT BE EXCEEDED UNDER THE WORST PROBABLE CONDITIONS. THE DEVICE MANUFACTURER CHOOSES THESE VALUES TO PROVIDE ACCEPTABLE SERVICEABILITY OF THE DEVICE, TAKING RESPONSIBILITY FOR THE EFFECTS OF CHANGES IN OPERATING CONDITIONS DUE TO VARIATIONS IN DEVICE CHARACTERISTICS. THE EQUIPMENT MANUFACTURER SHOULD DESIGN SO THAT INITIALLY AND THROUGHOUT LIFE NO DESIGN-MAXIMUM VALUE FOR THE INTENDED SERVICE IS EXCEEDED WITH A BOGEY DEVICE UNDER THE WORST PROBABLE OPERATING CONDITIONS WITH RESPECT TO SUPPLY-VOLTAGE VARIATION, EQUIPMENT COMPONENT VARIATION, EQUIPMENT CONTROL ADJUSTMENT, LOAD VARIATION, SIGNAL VARIATION, AND ENVIRONMENTAL CONDITIONS.

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 3% OF ONE SCANNING CYCLE.

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.

\[ E_f = 1.4 \text{ Volts} \]