TUNG-SOL

DIODE

COATED FILAMENT
1.25 VOLTS 0.2 AMP.
AC OR DC
ANY MOUNTING POSITION

CONNECTORS SHOULD NOT EXERT MORE THAN 7 POUNDS RADIAL COMPRESSION AT ANY POINT AROUND THE CIRCUMFERENCE OF THE CAP.

BOTTOM VIEW

BASED DIAGRAM
JEDC 3C

SOCKET TERMINALS 1, 3, 4, 5, 6, AND 8 MAY BE CONNECTED TO TERMINAL 7 OR TO A CORDAGE SHIELD WHICH CONNECTS TO TERMINAL 3. TERMINALS 4 AND 5 MAY BE USED AS TIE POINTS FOR COMPONENTS AT OR NEAR FILAMENT POTENTIAL.

THE 1J3 IS A FILAMENTARY DIODE DESIGNED FOR USE IN TELEVISION RECEIVERS AS THE HIGH-VOLTAGE RECTIFIER TO SUPPLY POWER TO THE ANODE OF THE TELEVISION PICTURE TUBE. IT IS INTENDED PRIMARILY FOR USE IN FLYBACK TYPES OF POWER SUPPLIES.

DIRECT INTERELECTRODE CAPACITANCES — APPROX.

PLATE TO FILAMENT

1.6 μμf

RATINGS

INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM FLYBACK RECTIFIER SERVICE

FILAMENT VOLTAGE
MAXIMUM PEAK INVERSE PLATE VOLTAGE
DC COMPONENT
TOTAL DC AND PEAK
MAXIMUM STEADY-STATE PEAK PLATE CURRENT
MAXIMUM DC OUTPUT CURRENT

1.25B VOLTS
22 000 VOLTS
26 000 VOLTS
50 MA.
0.5 MA.

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

FILAMENT VOLTAGE
FILAMENT CURRENT
TUBE VOLTAGE DROP (APPROX.) Ib = 7.0 MA. DC

1.25 VOLTS
0.2 AMP.
225 VOLTS

CONTINUED ON FOLLOWING PAGE

-INDICATES A CHANGE.
A 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 SCANNING CYCLE.

B UNDER NO CIRCUMSTANCES SHOULD THE FILAMENT VOLTAGE BE LESS THAN 2.05 VOLTS OR MORE THAN 2.45 VOLTS.

DESIGN-MAXIMUM RATINGS ARE LIMITING VALUES OF OPERATING AND ENVIRONMENTAL CONDITIONS APPLICABLE TO A BOGEN 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 SERVICABILITY 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 BOGEN 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.

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 CONSTUTUE 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.