THE 25D4 IS AN INDIRECTLY-HEATED HALF WAVE RECTIFIER DESIGNED FOR SERVICE AS A DAMPING DIODE IN HORIZONTAL DEFLECTION CIRCUITS OF 600 MA. SERIES HEATER OPERATED TELEVISION RECEIVERS. THERMAL CHARACTERISTICS OF THE HEATER ARE CONTROLLED SUCH THAT HEATER VOLTAGE SURGES DURING THE WARM-UP CYCLE ARE MINIMIZED PROVIDED IT IS USED WITH OTHER TYPES WHICH ARE SIMILARLY CONTROLLED.

DIRECT INTERELECTRODE CAPACITANCES – APPROX.

HEATER TO CATHODE
PLATE TO CATHODE & HEATER
CATHODE TO PLATE & HEATER

3.0 µµf
6.0 µµf
8.0 µµf

RATINGS
INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM – UNLESS OTHERWISE INDICATED

DAMPER SERVICE

HEATER VOLTAGE
HEATER CURRENT
MAXIMUM HEATER-CATHODE VOLTAGE:
HEATER NEGATIVE WITH RESPECT TO CATHODE
DC
TOTAL DC AND PEAK
900
4,000

HEATER POSITIVE WITH RESPECT TO CATHODE
DC
TOTAL DC AND PEAK
100
300

MAXIMUM DC PLATE CURRENT
155 MA.

MAXIMUM DC PLATE CURRENT (DESIGN CENTER SYSTEM)
145 MA.

MAXIMUM PEAK PLATE CURRENT
900 MA.

MAXIMUM PLATE DISSIPATION
5.5 WATTS

TUBE VOLTAGE DROP WITH Ib = 250 MA
22 VOLTS

HEATER WARM-UP TIME (APPROX.)
11.0 SECONDS

*PINS 1, 2, 4, & 6 MUST NOT BE USED AS TIE POINTS.

A TIE UNUSED PINS AND METAL PART TO HEATER.

B 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 OF THE HORIZONTAL VOLTAGE PULSE NOT TO EXCEED 35% OF ONE SCANNING CYCLE.
*Heater warm-up time is defined as the time required for the voltage across the heater to reach 80% of its rated voltage after applying 4 times rated heater voltage to a circuit consisting of the tube heater in series with a resistance of value 3 times the nominal heater operating resistance.

Design-maximum ratings are the limiting values expressed with respect to bogie tubes at which satisfactory tube life can be expected to occur. To obtain satisfactory circuit performance, therefore, the equipment designer must establish the circuit design so that no design-maximum value is exceeded with a bogie tube under the worst probable operating conditions with respect to supply-voltage variation, equipment component variation, equipment control adjustment, load variation, and environmental conditions.