DIODE

UNIPOTENTIAL CATHODE
HEATER
16.8 VOLS 0.45 AMP.
AC OR DC
ANY MOUNTING POSITION

GLASS BULB

THE 17D4 IS AN INDIRECTLY-HEATED HALF WAVE RECTIFIER DESIGNED FOR SERVICE AS A DAMPING DIODE IN HORIZONTAL DEFLECTIONcircuits OF 450 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 3.0 µf
PLATE TO CATHODE & HEATER 6.0 µf
CATHODE TO PLATE & HEATER 8.0 µf

RATINGS

INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM — UNLESS OTHERWISE INDICATED

DAMPER SERVICE

HEATER VOLTAGE 16.8 VOLS
HEATER CURRENT 0.6 AMP
MAXIMUM HEATER—CATHODE VOLTAGE:
HEATER NEGATIVE WITH RESPECT TO CATHODE
DC 900 VOLS
TOTAL DC AND PEAK 4 400 VOLS
HEATER POSITIVE WITH RESPECT TO CATHODE
DC 100 VOLS
TOTAL DC AND PEAK 300 VOLS
MAXIMUM PEAK INVERSE VOLTAGE 4 400 VOLS
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.
HEATER WARM-UP TIME (APPROX.) 11.0 SECONDS

**PINS 3, 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 15% OF ONE SCANNING CYCLE.

CONTINUED ON FOLLOWING PAGE
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,
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 ADJUST-
MENT, LOAD VARIATION, AND ENVIRONMENTAL CONDITIONS.
DIODE

UNIPOTENTIAL CATHODE

HEATER
15.8 VOLTS  0.45 AMP.
AC OR DC
ANY MOUNTING POSITION

GLASS BULB
INTERMEDIATE SHELL 55-85 OR
SHORT INTERMEDIATE SHELL 86-60
8 PIN OCTAL
OUTLINE DRAWING
JEDEC 40G

THE 17D4 IS AN INDIRECTLY-HEATED HALF WAVE RECTIFIER DESIGNED FOR SERVICE AS A DAMPING DIODE IN HORIZONTAL DEFLECTION CIRCUITS OF 450 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  3.0  pf
PLATE TO CATHODE & HEATERA  6.0  pf
CATHODE TO PLATE & HEATERA  8.0  pf

RATINGS
INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM — UNLESS OTHERWISE INDICATED

DAFTER SERVICEB

HEATER VOLTAGE  15.8  VOLTS
HEATER CURRENT  0.45  AMP.
MAXIMUM HEATER—CATHODE VOLTAGE:
HEATER NEGATIVE WITH RESPECT TO CATHODE
DC  900  VOLTS
TOTAL DC AND PEAK  4000  VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE
DC  100  VOLTS
TOTAL DC AND PEAK  300  VOLTS
MAXIMUM PEAK INVERSE VOLTAGE  4000  VOLTS
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 ID  250 MA.
HEATER WARM-UP TIME (APPROX.)  22  VOLTS
11.0  SECONDS

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 15% OF ONE SCANNING CYCLE.

CONTINUED ON FOLLOWING PAGE
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.