THE 12AX5 IS A HEATER-CATHODE SINGLE DIODE IN THE COMPACT 12 PIN, T-9 CONSTRUCTION. IT IS SPECIFICALLY DESIGNED FOR USE AS A DAMPING DIODE IN T.V. RECEIVERS. EXCEPT FOR HEATER CHARACTERISTICS AND HEATER WARM-UP TIME, THE 12AX5 IS IDENTICAL TO THE 6AX5.

DIRECT INTERELECTRODE CAPACITANCES
WITHOUT EXTERNAL SHIELD

- CATHODE TO PLATE AND HEATER: K TO (P+H) 7.5 pF
- PLATE TO CATHODE AND HEATER: P TO (K+H) 5.5 pF
- HEATER TO CATHODE: (H TO K) 2.8 pF

HEATER CHARACTERISTICS AND RATINGS
DESIGN MAXIMUM VALUES - SEE ETA STANDARD RS-299

AVERAGE CHARACTERISTICS
12.6 VOLTS 600 MA.

HEATER SUPPLY LIMITS:
CURRENT OPERATION 600±40 MA.

MAXIMUM HEATER-CATHODE VOLTAGE:
- HEATER NEGATIVE WITH RESPECT TO CATHODE
  DC COMPONENT 900 VOLTS
  TOTAL DC AND PEAK 5000 VOLTS
- HEATER POSITIVE WITH RESPECT TO CATHODE
  DC COMPONENT 100 VOLTS
  TOTAL DC AND PEAK 300 VOLTS

HEATER WARM-UP TIME 11 SECONDS

* THE EQUIPMENT DESIGNER SHALL DESIGN THE EQUIPMENT SO THAT THE HEATER VOLTAGE IS CENTERED AT THE SPECIFIED ROGEE PRESSURE, WITH HEATER SUPPLY VARIATIONS RESTRICTED TO MAINTAIN HEATER VOLTAGE WITHIN THE SPECIFIED TOLERANCE.

CONTINUED ON FOLLOWING PAGE
MAXIMUM RATINGS®
DESIGN MAXIMUM VALUES – SEE EIA STANDARD RS-239

TV DAMPER SERVICE

PEAK INVERSE PLATE VOLTAGE  5000 VOLTS
PLATE DISSIPATION  9.3 WATTS
STEADY-STATE PEAK PLATE CURRENT  1000 MA.
DC OUTPUT  165 MA.

AVERAGE CHARACTERISTICS

TUBE VOLTAGE DROP
\[ I_b = 250 \text{ MILLIAMPERES DC} \]
32 VOLTS

*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.

**FOR OPERATION IN A 575-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 25% OF THE SCANNING CYCLE.