LANSDALE TUBE COMPANY
RADIO AND TELEVISION TUBES

6L3
High Voltage Diode Damper Tube
March 12, 1956

GENERAL DESCRIPTION

Application: The 6L3 is a half wave high vacuum diode designed for application as a damping diode in television sweep circuits.

MECHANICAL DATA

Coated unipotential cathode
Outline drawing: None Bulb: T-12
Base: Short intermediate shell contact B8-118
Top Cap: Cl-3, Cl-2 skirted miniature
Maximum diameter: 1 9/16"
Maximum overall length: 4 7/8"
Maximum seated height: 4 5/16"
Pin connections
Pin 1 = internal connection to Pin 5 = no connection
Pin 2 = heater Pin 6 = no connection
Pin 7 = internal connection to Pin 3 & 5
Pin 3 = plate Pin 8 = heater
Pin 4 = no connection Top Cap-Cathode
Pin 5 = internal connection to PINS 3 & 7
Mounting position: Any

ELECTRICAL DATA

Direct Inter-electrode Capacitance
Plate to cathode and heater P to (k ≠ h) 17.5 uuf
Heater to cathode (h to k) 3.3 uuf
Cathode to plate and heater K to (p ≠ h) 19.5 uuf

Average characteristics
Heater voltage 6.3 volts
Heater current 3.0 amperes
Tube voltage drop (with tube conducting 640 ma) 22 volts

*Heating & Damper Diode *

Maximum peak inverse plate voltage (absolute maximum)* 6000 volts
Maximum heater-cathode voltage
Heater negative with respect to cathode (absolute maximum)*
DC 750 volts
Total DC and peak 6750 volts
Heater positive with respect to cathode:
DC 100 volts
Total DC and peak 300 volts
Maximum DC plate current 320 ma
Maximum peak plate current 1.1 amps
Maximum plate dissipation 8.0 watts
Absolute maximum ratings are the limiting values above which the service ability of the tube may be impaired from the viewpoint of life and satisfactory performance. Therefore, in order not to exceed these absolute ratings, the equipment designer has the responsibility of determining an average design value for each rating below the absolute value of that rating by an amount such that the absolute values will never be exceeded under any usual conditions of line voltage variation, manufacturing variation (including controls) in the equipment itself, or adjustments of controls.

§ All values are evaluated on design center system except where otherwise noted.

§§ For operation in a 525 line, 30 frame system as described in "Standards of Good Engineering Practice for Television Broadcasting Stations" Federal Communications Commission. The duty cycle of the horizontal voltage pulse not to exceed 15% of a scanning cycle. Power rectifier operation not recommended.

Refer to "Interpretation of Receiving Tube Ratings"