LANSDALE TUBE COMPANY

RADIO AND TELEVISION TUBES

LANSDALE
PENNSYLVANIA
March 12, 1956

6W3
High Voltage Diode Damper Tube

GENERAL DESCRIPTION

Application: The 6W3 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 octal B8-118
Top Cap	C1-3, C1-2 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 2	Pin 6 - No connection
Pin 2 - heater	Pin 7 - Internal connection to Pins 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 Interelectrode 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

*Ratings (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

March 12, 1956

613

* Absolute maximum ratings are the limiting values above which the serviceability 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 variations (including components) in the equipment itself, or adjustments of controls.

§ All values are evaluated on design center system except where absolute maximum is stated.

§§ 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 is not recommended.