

May 15, 1958

TELEVISION DAMPING DIODE TYPES 6DA4, 12D4 and 17D4

The 6DA4, 12D4 and 17D4 are 6-pin octal indirectly-heated half-wave rectifiers designed for service as the damping diode in horizontal deflection circuits of television receivers.

The 12D4 and 17D4 have been designed for use in receivers which employ series connected heaters, especially in television receivers where the picture-tube heater is in series with other heaters. When each is employed in this type of circuit with other tubes similarly designed having the same heater current rating, heater voltage surges across individual tubes are minimized inasmuch as heater warm-up characteristic is controlled.

GENERAL DATA

ELECTRICAL:

Cathode.....				Unipotential
Heater:	6DA4	12D4	17D4	
Voltage (ac or dc).....	6.3	12.6	16.8	Volts
Current.....	12	0.6	0.45	Ampere
Warm-up Time (Approx.)**.....	--	11	11	Seconds
Direct Interelectrode Capacitances:				
Heater to Cathode.....	3.0			uuf
Plate to Cathode and Heater.....	6.0			uuf
Cathode to Plate and Heater.....	8.0			uuf

MECHANICAL:

Bulb.....	T-9
Base.....	Intermediate-Shell Octal 6-Pin (JETEC B6-8)
	Short Intermediate-Shell Octal 6-Pin (JETEC B6-60)
Basing.....	4CG
Mounting Position.....	Any

DAMPER SERVICE*

MAXIMUM RATINGS:

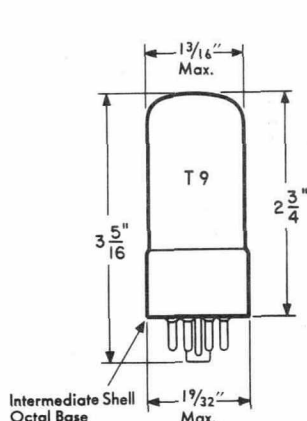
Design Maximum Values (*n*)

Peak Inverse Voltage.....	4400 max.	Volts
Peak Plate Current.....	900 max.	Ma.
DC Plate Current.....	155 max.	Ma.
Heater-Cathode Voltage:		
Heater Negative with Respect to		
Cathode.....	900 max.	Volts
Total DC and Peak.....	4400 max.	Volts
Heater Positive with Respect to		
Cathode.....	100 max.	Volts
Total DC and Peak.....	300 max.	Volts
Voltage Drop at $I_b = 250$ Ma.....	21	Volts
Plate Dissipation.....	5.5 max.	Watts

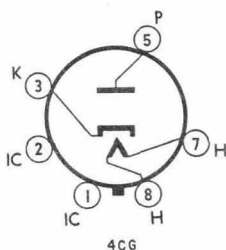
* For operation in a 525 line, 30 frame system as described in "Standards of Good Engineering Practice for Television Broadcasting Stations, Federal Communications Commission". The duty of the horizontal voltage pulse not to exceed 15% of one scanning cycle.

n Design-Maximum Ratings are the limiting values expressed with respect to bogie tubes at which satisfactory tube life can be expected to occur in the types of service for which the tube is rated. Therefore the equipment designed must establish the circuit design so that initially and throughout equipment life no Design-Maximum value is exceeded with a bogie tube under the worst probable operating conditions with respect to supply-voltage variation, equipment control adjustment, load variation and environmental conditions.

** Heater warm-up time is defined as the time required for the voltage across the heater to reach 80% of its rated value after applying four times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to three times rated heater voltage divided by rated heater current.



CE-A564



NOTE: Pins 1, 2, 4, 6 must not be used as tie points.

AVERAGE CHARACTERISTICS

