

6W4-GT - 25W4-GT
Description and Rating

DIODE

FOR TV DAMPING DIODE APPLICATIONS

The 6W4-GT and 25W4-GT are high-vacuum, heater-cathode type diodes each of which is intended for use as the damping diode in the horizontal-deflection circuit of television receivers. Except for heater ratings and direct interelectrode capacitances, the 6W4-GT and 25W4-GT are identical. Each type exhibits a high-perveance characteristic and is capable of withstanding the relatively high pulse voltages normally encountered in this application.

GENERAL

Cathode - Coated Unipotential

	<i>6W4-GT</i>	<i>25W4-GT</i>	
Heater Voltage, A-C or D-C	6.3	25.0	Volts
Heater Current	1.2	0.3	Amperes

Envelope - T-9, Glass
Base - B5-82 or B6-9, Intermediate Shell Octal
or B5-85 or B6-60, Short Intermediate Shell Octal
Mounting Position - Any

Direct Interelectrode Capacitances, approximate *

	<i>6W4-GT</i>	<i>25W4-GT</i>	
Cathode to Plate and Heater	13	17	$\mu\mu\text{f}$
Plate to Cathode and Heater	6.0	6.0	$\mu\mu\text{f}$
Heater to Cathode	7.0	11	$\mu\mu\text{f}$

MAXIMUM RATINGS

DESIGN-CENTER VALUES UNLESS OTHERWISE INDICATED

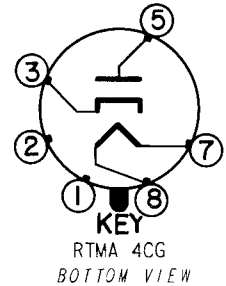
	Damper Service †		
Peak Inverse Plate Voltage §	3850		Volts
Plate Dissipation	3.5		Watts
Steady-State Peak Plate Current	750		Milliamperes
D-C Output Current	125		Milliamperes

	<i>6W4-GT</i>	<i>25W4-GT</i>	
Heater-Cathode Voltage			
Heater Positive with Respect to Cathode			
D-C Component	100	100	Volts
Total D-C and Peak	300	200	Volts
Heater Negative with Respect to Cathode §			
D-C Component	500	---	Volts
Total D-C and Peak	2300	500	Volts

AVERAGE CHARACTERISTICS

Tube Voltage Drop			
AT 250 Milliamperes D-C	21		Volts

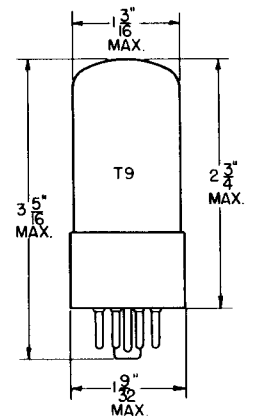
BASING DIAGRAM



TERMINAL CONNECTIONS

- Pin 1 - No Connection †
- Pin 2 - No Connection
- Pin 3 - Cathode
- Pin 5 - Plate
- Pin 7 - Heater
- Pin 8 - Heater

PHYSICAL DIMENSIONS



RTMA 9-11 or 9-41

* Without external shield.

+ Pin 1 omitted on bases B5-82 and B5-85.

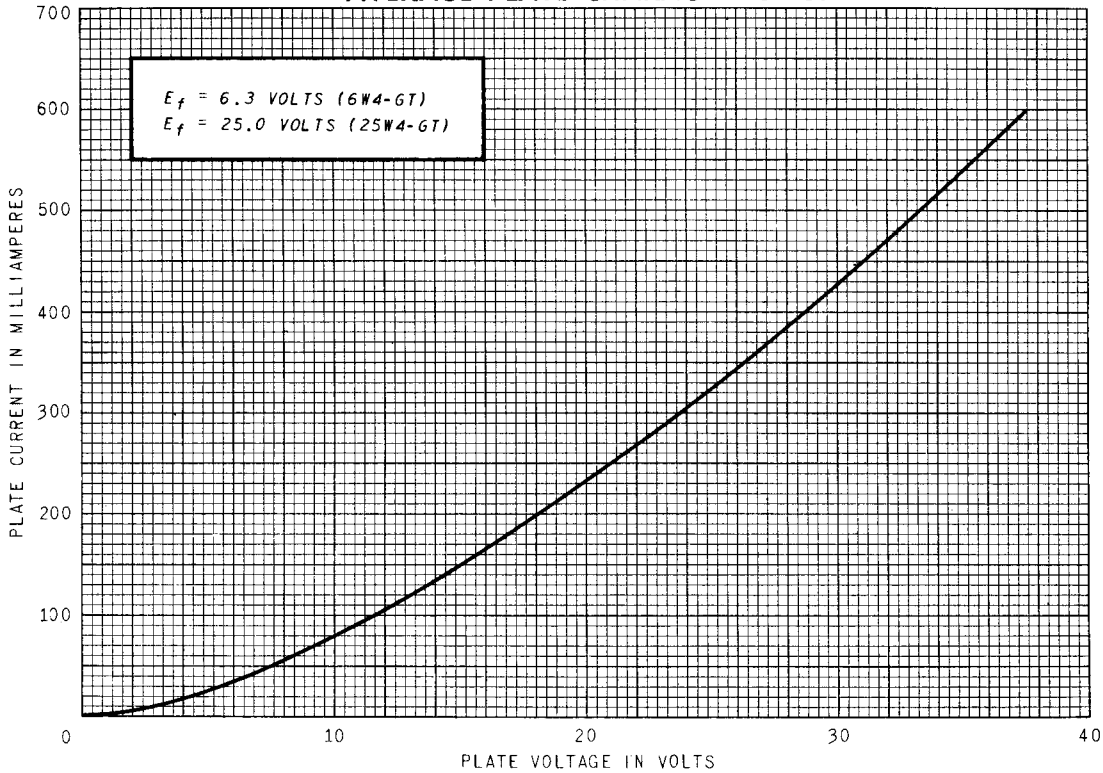
‡ For operation in a 525-line, 30-frame television system as described in "Standards of Good Engineering Practice for Television Stations; Federal Communications Commission". The duty cycle of the voltage pulse must not exceed 15 percent of one scanning cycle.

§ Value given is to be considered as an Absolute Maximum Rating. In this case, the combined effect of supply voltage variation, manufacturing variation including components in the equipment, and adjustment of equipment controls should not cause the rated value to be exceeded.

Note: Socket terminals 1, 2, 4 and 6 should not be used.

Operation of this tube as a power rectifier is not recommended.

AVERAGE PLATE CHARACTERISTICS



TUBE DEPARTMENT



Schenectady 5, N. Y.