



# 12AX4-GT

## HALF-WAVE VACUUM RECTIFIER

For Television Damper Service

TENTATIVE DATA

RCA-12AX4-GT is a half-wave vacuum rectifier of the heater-cathode type designed primarily for use as a damper tube in horizontal deflection circuits of television receivers utilizing series-heater strings.

Designed with insulation between heater and cathode to withstand negative peak pulses between heater and cathode of as much as 4000 volts with a dc component up to 900 volts, the 12AX4-GT provides flexibility in choice of deflection circuits.

### GENERAL DATA

#### Electrical

Heater, for Unipotential Cathode:		
Voltage (AC or DC) . . . . .	12.6	volts
Current . . . . .	0.6	amp
Direct Interelectrode Capacitances (With no external shield):		
Heater to Cathode . . . . .	7.5	$\mu\text{mf}$

#### Mechanical:

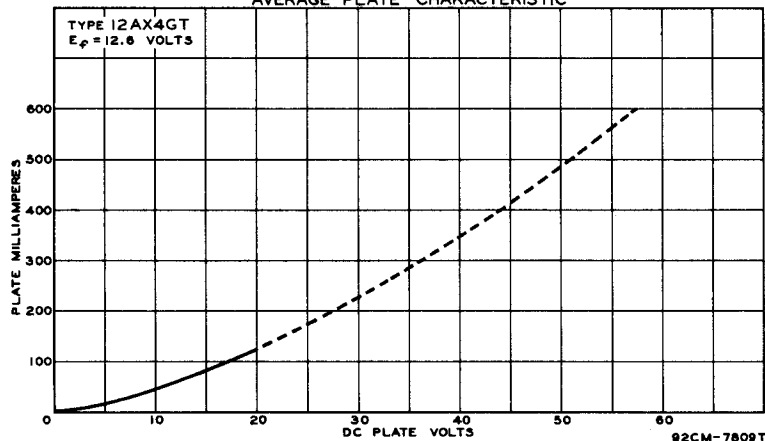
Mounting Position . . . . .	Any
Maximum Overall Length . . . . .	3-5/16"
Maximum Seated Length . . . . .	2-3/4"
Maximum Diameter . . . . .	1-9/32"
Bulb . . . . .	T-9
Base . . . . .	Short Intermediate-Shell Octal 5-Pin

### DAMPER SERVICE

#### Maximum Ratings, Design-Center Values:

PEAK INVERSE PLATE VOLTAGE . . . . .	4000*	max. volts
PEAK PLATE CURRENT . . . . .	600	max. ma
HOT-SWITCHING TRANSIENT PLATE CURRENT For duration of 0.2 second maximum. . . . .	3.0	max. amp
DC PLATE CURRENT . . . . .	125	max. ma
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode . . . . .	4000 <sup>▲</sup>	max. volts
Heater positive with respect to cathode . . . . .	100	max. volts

#### AVERAGE PLATE CHARACTERISTIC

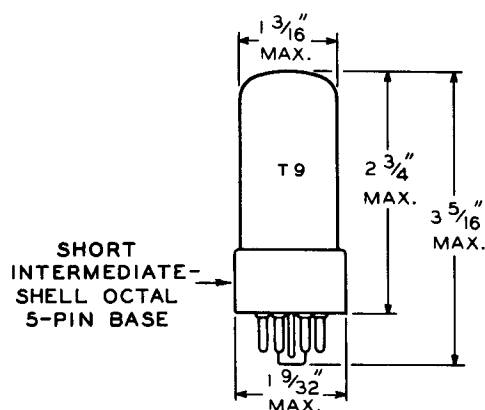


Average Plate Characteristic of Type 12AX4-GT.

### OPERATING CONSIDERATIONS

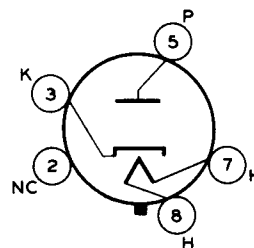
The *maximum ratings* in the tabulated data for the 12AX4-GT are working design-center maximums established according to the standard design-center system of rating electron tubes. Tubes so rated will give satisfactory performance in equipment designed so that these maximum ratings will not be exceeded when the equipment is operated from ac or dc power-line supplies whose normal voltage including normal variations falls within  $\pm 10$  per cent of line center voltage value of 117 volts.

### DIMENSIONAL OUTLINE



### SOCKET CONNECTIONS

#### Bottom View



- PIN 2: NO CONNECTION
- PIN 3: CATHODE
- PIN 5: PLATE
- PIN 7: HEATER
- PIN 8: HEATER

\* This rating is applicable when the duty cycle of the voltage pulse does not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.

▲ The dc component must not exceed 900 volts.