6AY3B

Half-Wave Vacuum Rectifier

NOVAR TYPE

For Television Damper Service

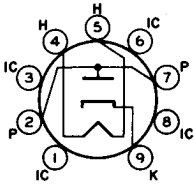
Electrical:

Heater Characteristics and Ratings:		
Voltage (AC or DC)	6.3 ± 0.6	volts
Current at heater volts = 6.3	1.200	amp
Peak heater-cathode voltage:		
Heater negative with respect to cathode[a]	5000[b] max.	volts
Heater positive with respect to cathode	300[c] max.	volts
Direct Interelectrode Capacitances (Approx.):[d]		
P to (K,H)	6.5	pf
K to (P,H)	9.0	pf
Heater to cathode	2.8	pf

Mechanical:

Operating Position	Any
Type of Cathode	Coated Unipotential
Maximum Overall Length	3.005"
Seated Length	2.375" to 2.625"
Dimensional Outline	See *General Section*
Diameter	1.062" to 1.188"
Bulb	T9
Base	Small-Button Novar 9-Pin with Exhaust Tip (JEDEC No. E9-89)
Basing Designation for BOTTOM VIEW	9HP

Pin 1 – Do Not Use[e]
Pin 2 – Plate
Pin 3 – Do Not Use[e]
Pin 4 – Heater



Pin 5 – Heater
Pin 6 – Do Not Use[e]
Pin 7 – Plate
Pin 8 – Do Not Use[e]
Pin 9 – Cathode

DAMPER SERVICE

For operation in a 525-line, 30-frame system[f]

Maximum Ratings, *Design-Maximum Values:*

Peak Inverse Plate Voltage[a]	5000	max.	volts
Peak Plate Current	1100	max.	ma
Average Plate Current	175	max.	ma
Plate Dissipation	6.5	max.	watts

Characteristic, Instantaneous Value:

Tube Voltage Drop for plate ma = 350	32	volts

[a] This rating is applicable when the duration 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.

[b] The dc component must not exceed 900 volts.

[c] The dc component must not exceed 100 volts.

[d] Without external shield.

[e] Socket terminals 1, 3, 6, and 8 should not be used as tie points. It is recommended that the socket clips for these pins be removed to reduce the possibility of arc-over and to minimize leakage.

[f] As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.