

Half-Wave Vacuum Rectifier For Color-TV Damper – Diode Applications

ELECTRICAL CHARACTERISTICS – Bogey Values

Heater Voltage, ac or dc	E_h	6.3	V
Heater Current	I_h	2.4	A
Direct Interelectrode Capacitances: ^a			
Plate to cathode and heater	$c_{p(k+h)}$	13	pF
Cathode to plate and heater	$c_{k(p+h)}$	16	pF
Heater to cathode	c_{h-k}	4.0	pF
Instantaneous Tube Voltage			
Drop for instantaneous plate current (i_b) = 350 mA			
	e_b	14	V

MECHANICAL CHARACTERISTICS

Maximum Overall Length	3.380 in (85.85 mm)
Maximum Seated Length	3.000 in (76.20 mm)
Maximum Diameter	1.188 in (30.17 mm)
Envelope	JEDEC T9
Base ^b	Small-Button Novar 9-Pin with Exhaust Tip (JEDEC E9-89)
Terminal Diagram	JEDEC 9HP
Type of Cathode	Coated Unipotential
Operating Position	Any

MAXIMUM RATINGS – Design-Maximum Values^c

*For operation as a Damper Tube in Color-TV Receivers
utilizing a 525-line, 30-frame system*

Peak Inverse Plate Voltage, $-e_{bm}$	5500 ^d	V
Heater-Cathode Voltage:		
Peak	e_{hkm}	$\left. \begin{array}{l} +300 \\ -5500 \end{array} \right\}$ V
Average ^e	$E_{hk(av)}$	$\left. \begin{array}{l} +100 \\ -900 \end{array} \right\}$ V
Heater Voltage, ac or dc	E_h	5.7 to 6.9 V
Plate Current:		
Peak	i_{bm}	2100 mA
Average ^e	$I_{b(av)}$	350 mA
Plate Dissipation	P_b	9.0 W
Envelope Temperature (at hottest point on envelope surface)		
	T_E	220 °C

6DN3

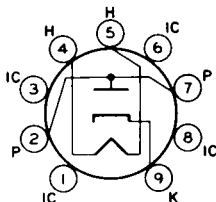
- ^a Measured without external shield in accordance with the current issue of EIA Standard RS-191.
- ^b Designed to mate with Novar 9-Contact Socket generally available from your local RCA Distributor.
- ^c As defined in the current issue of EIA Standard RS-239.
- ^d This rating is applicable when the duration of the voltage pulse does not exceed 15% of one horizontal scanning cycle. In a 525-line, 30-frame system, 15% of one horizontal scanning cycle is 10 μ s.
- ^e Measured with a dc meter.

OPERATING CONSIDERATIONS

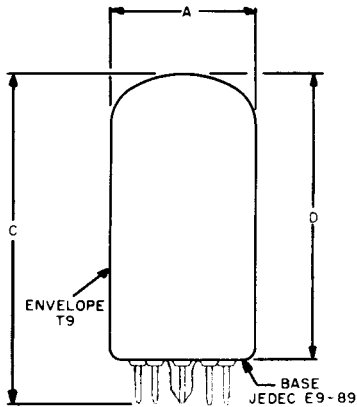
Socket terminals 1, 3, 6, and 8 should not be used as tie points for external-circuit components. It is recommended that the socket tabs be removed to reduce the possibility of arc-over and to minimize leakage.

TERMINAL DIAGRAM (Bottom View) - JEDEC 9HP

- Pin 1 - Do Not Use
- Pin 2 - Plate
- Pin 3 - Do Not Use
- Pin 4 - Heater
- Pin 5 - Heater
- Pin 6 - Do Not Use
- Pin 7 - Plate
- Pin 8 - Do Not Use
- Pin 9 - Cathode



DIMENSIONAL OUTLINE – JEDEC 9-111



92CS-13350R1

DIMENSION	INCHES			MILLIMETERS		
	Min.	Nom.	Max.	Min.	Nom.	Max.
A	1.062*	—	1.188	26.96*	—	30.17
C	—	—	3.380	—	—	85.85
D	—	—	3.000	—	—	76.20

MILLIMETER DIMENSION DERIVED
FROM INCH DIMENSION

* Applies to the minimum diameter except in the area of the seal.