

Half-Wave Vacuum Rectifier

Novar Type

For Color-TV Damper-Diode Applications

ELECTRICAL CHARACTERISTICS — Bogey Values

Heater Voltage, ac or dc	E_h	6.3	V
Heater Current	I_h	1.8	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) = 700 mA . .	e_b	25	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

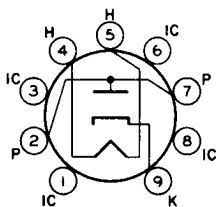
Peak Inverse Plate Voltage, — e_{bm}	5500 ^d	V
Heater-Cathode Voltage:		
Peak	e_{hkm}	{ +300 V -5500 V
Average ^e	$E_{hk(av)}$	{ +100 V -900 V
Heater Voltage, ac or dc . . .	E_h	5.7 to 6.9 V
Plate Current:		
Peak	i_{bm}	2100 mA
Average ^e	$I_{b(av)}$	350 mA
Plate Dissipation	P_b	6.5 W
Envelope Temperature (at hottest point on envelope surface)	T_E	220 °C

- 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