

Half-Wave Vacuum Rectifier

Novar Type

For Black-and-White-TV Damper Diode Applications

ELECTRICAL CHARACTERISTICS – Bogue Values

Heater Voltage, ac or dc	E_h	6.3	V
Heater Current	I_h	1.2	A
Direct Interelectrode Capacitances: ^a			
Plate to cathode and heater	$c_{p(k+h)}$	6.5	pF
Cathode to plate and heater	$c_{k(p+h)}$	9.0	pF
Heater to cathode	c_{hk}	3.0	pF
Instantaneous Tube Voltage Drop for instantaneous plate current (i_b) = 350 mA	e_b	16	V

MECHANICAL CHARACTERISTICS

Maximum Overall Length (l_m)	3.410in.(86.61 mm)
Maximum Seated Length (l_{sm})	3.030in.(76.96 mm)
Maximum Diameter (d_m)	1.188in.(30.1 mm)
Envelope	JEDEC Designation T9
Base ^b	Small-Button Novar 9-Pin with Exhaust Tip (JEDEC Designation E9-89)

Terminal Connections

(See TERMINAL DIAGRAM)	JEDEC Designation 9HP
Type of Cathode	Coated Unipotential
Operating Position	Any

MAXIMUM RATINGS – Design-Maximum Values^c

For operation as a Damper Tube in Black-and-White-TV Receivers utilizing a 525-line, 30-frame system^d

Peak Inverse Plate Voltage . . .	$-e_{bm}$	5200 ^e	V
Heater-Cathode Voltage:			
Peak	e_{hkm}	$\begin{cases} +300 \\ -5200 \end{cases}$	$\begin{matrix} V \\ V \end{matrix}$
Average ^f	$E_{hk(av)}$	$\begin{cases} +100 \\ -900 \end{cases}$	$\begin{matrix} V \\ V \end{matrix}$
Heater Voltage	E_h	5.7 to 6.9	V

6CK3

Plate Current:

Peak	i_{bm}	1200	mA
Average ^f	$I_{b(av)}$	250	mA
Plate Dissipation	P_b	6.5	W
Envelope Temperature (at hot-test point on envelope surface)	T_E	220	°C

^aMeasured without external shield in accordance with the current issue of EIA Standard RS-191.

^bDesigned to mate with Novar 9-Contact Socket generally available from your local RCA Distributor.

^cAs defined in the current issue of EIA Standard RS-239.

^dAs described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations", Federal Communications Commission.

^eThis 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% on one horizontal scanning cycle is 10 μ s.

^fMeasured 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 these socket tabs be removed to reduce the possibility of arc-over and to minimize leakage.

TERMINAL DIAGRAM (Bottom View)

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

