

Half-Wave Rectifier

9-Pin Miniature Type

$$i_{bm} = 1200 \text{ max. mA}$$

$$P_b = 4.75 \text{ max. W}$$

For Black-and-White and Small-Screen Color-TV
Damper Diode Applications

ELECTRICAL CHARACTERISTICS - Bogey 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 $C_{p(k+h)}$ 12.0 pF

Cathode to plate

and heater $C_{k(p+h)}$ 9.5 pF

Heater to cathode C_{hk} 2.8 pF

Instantaneous Tube Voltage

Drop for instantaneous

plate current (i_b) = 350 mA. e_b 16 V

MECHANICAL CHARACTERISTICS

Maximum Overall Length (l_m) 3.125 in (79.37 mm)

Maximum Seated Length (l_{sm}) 2.875 in (73.02 mm)

Maximum Diameter (d_m) 0.875 in (22.22 mm)

Envelope. JEDEC Designation 6-1/2

Base Small-Button Noval 9-Pin JEDEC Designation E9-1

Terminal Connections

(See *TERMINAL DIAGRAM*) JEDEC Designation 9RX

Type of Cathode Coated Unipotential

Operating Position Any

MAXIMUM RATINGS - Design-Maximum Values^b

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

Peak Inverse Plate Voltage. . e_{bm} 5000^d V

Heater-Cathode Voltage:

Peak e_{hkm} $\begin{cases} +300 \\ -5000 \end{cases}$ V

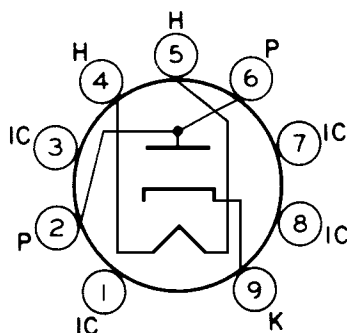
6CT3

Average ^e	$E_{hk(av)}$	$\begin{cases} +100 \\ -900 \end{cases}$	$\begin{matrix} V \\ V \end{matrix}$
Heater Voltage, ac or dc . . .	E_h	5.7 to 6.9	V
Plate Current:			
Peak	i_{bm}	1200	mA
Average ^e	$I_{b(av)}$	250	mA
Plate Dissipation	P_b	4.75	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 As defined in the current issue of EIA Standard RS-239.
- ^c As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations", Federal Communications Commission.
- ^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.

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 - Plate
Pin 7 - Do Not Use
Pin 8 - Do Not Use
Pin 9 - Cathode



JEDEC 9RX

OPERATING CONSIDERATIONS

Socket terminals 1, 3, 7, 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.