6CT3

Half-Wave Rectifier

9-Pin Miniature Type

i_{bm} = 1200 max. mA P_b = 4.75 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}	+300	V
		-5000	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}	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.

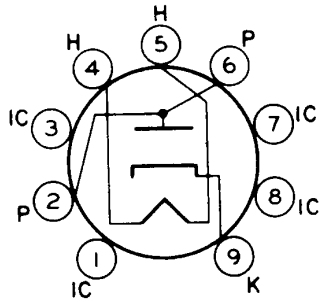
[c] As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations", Federal Communications Commission.

[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 μs.

[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.