

# Half-Wave Vacuum Rectifier

## NOVAR TYPE

### "PRESSURE-WELDED" CATHODE COATING

*For Color-TV Damper-Diode Applications*

### ELECTRICAL CHARACTERISTICS

#### Bogey Values

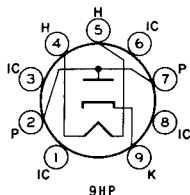
Heater Voltage (AC or DC) . . . . .	$E_h$	6.3	V
Heater Current. . . . .	$I_h$	2.4	A
<b>Direct Interelectrode Capacitances</b>			
Without external shield			
Plate to cathode and heater . . . . .	$c_p(k+h)$	20	pF
Cathode to plate and heater . . . . .	$c_k(p+h)$	18	pF
Heater to cathode . . . . .	$c_{h-k}$	4.0	pF
Instantaneous Tube Voltage Drop . . . . .	$e_b$	10	V
For instantaneous plate current			
$(i_b) = 350 \text{ mA}$			

### MECHANICAL CHARACTERISTICS

Operating Position. . . . .	Any
Type of Cathode . . . . .	Coated Unipotential
Maximum Overall Length. . . . .	3.005 in
Maximum Seated Length . . . . .	2.625 in
Maximum Diameter. . . . .	1.188 in
Dimensional Outline . . . . .	See <i>General Section</i>
Envelope. . . . .	.T9
Base. . . . .	Small-Button Novar 9-Pin With Exhaust Tip (JEDEC E9-89)

### 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



### DESIGN-MAXIMUM RATINGS

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

Peak Inverse Plate Voltage. . . . .	$-e_{bm}$	5500 <sup>a</sup>	V
<b>Heater-Cathode Voltage</b>			
Peak. . . . .	$e_{hkm}$	+300	V
		-5500	V
Average . . . . .	$E_{hk(av)}$	+100	V
		-900	V
Heater Voltage (AC or DC) . . . . .	$E_h$	5.7 to 6.9	V



# 6CM3

## Plate Current

Peak . . . . .	$i_{bm}$	1700	mA
Average . . . . .	$I_{b(av)}$	400	mA
Plate Dissipation . . . . .	$P_b$	12	W

<sup>a</sup> 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  $\mu$ s.

## 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.

