

# 6CM3

## Half-Wave Vacuum Rectifier

NOVAR TYPE

"PRESSURE-WELDED" CATHODE COATING

*For Color-TV Damper-Diode Applications*

### ELECTRICAL CHARACTERISTICS

Bogey Values

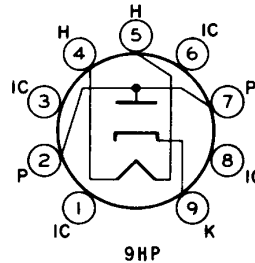
Heater Voltage (AC or DC) . . . . .	$E_h$	6.3	V
Heater Current . . . . .	$I_h$	2.4	A
<b>Direct Interelectrode Capacitances</b>			
Without external shield			
Plate to cathode and heater . . . . .	$c_p(k+h)$	20	pF
Cathode to plate and heater . . . . .	$c_k(p+h)$	18	pF
Heater to cathode . . . . .	$c_{h-k}$	4.0	pF
<b>Instantaneous Tube Voltage Drop</b> . . . . .	$e_b$	10	V
For instantaneous plate current ( $i_b$ ) = 350 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	
Heater-Cathode Voltage	Peak . . . . .	$e_{hkm}$	+300	V
			-5500	V
			Average . . . . .	$E_{hk(av)}$
			-900	V
Heater Voltage (AC or DC) . . . . .	$E_h$	5.7 to 6.9	V	



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## 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.

