3A3

Half-Wave Vacuum Rectifier

For High-Voltage Rectifier Circuits in Color and Black-and-White TV Receivers

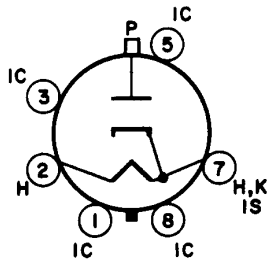
Electrical:

	Min.	*Av.*	*Max.*	
Heater Characteristics and Ratings:				
Voltage (AC or DC)	2.65	3.15	3.65	volts
Current at heater volts = 3.15	-	0.220	-	amp
Direct Interelectrode Capacitance (Approx.):				
Without external shield				
P to (K+IS+H)	-	1.5	-	pf

Mechanical: ←

Operating Position	Any
Type of Cathode	Coated Unipotential
Maximum Overall Length	4-1/16"
Seated Length	3-5/16" ± 3/16"
Maximum Diameter	1-9/32"
Dimensional Outline (JEDEC No.9-51)	See *General Section*
Bulb	T9
Cap	Small (JEDEC No.C1-1) or Small with Tubular Support (JEDEC No.C1-34)
Bases (Alternates):	
Intermediate-Shell Octal:	
6-Pin, Arrangement 1 (JEDEC Group 1, No.B6-8)	
Short Intermediate Shell Octal with External Barriers:	
6-Pin, Arrangement 1 (JEDEC Group 1, No.B6-60)	
Basing Designation for BOTTOM VIEW	8EZ

Pin 1 - Do Not Use
Pin 2 - Heater
Pin 3 - Do Not Use
Pin 5 - Do Not Use
Pin 7 - Heater, Cathode, Internal Shield
Pin 8 - Do Not Use
Cap - Plate



PULSED-RECTIFIER SERVICE

Maximum Ratings, *Design-Maximum Values:* ←

For operation in a 525-line, 30-frame system

Peak Inverse Plate Voltage[a]	30000	volts
Peak Plate Current	88	ma
Average Plate Current	1.7	ma

[a] This rating is applicable when the duration of the voltage pulse does not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.

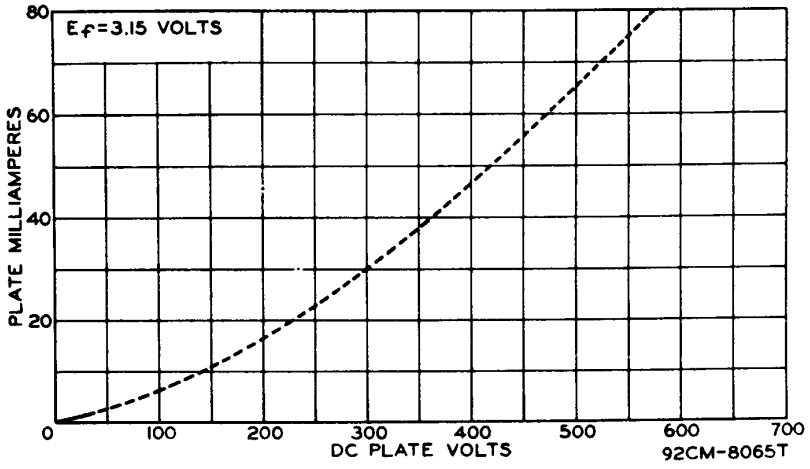
← Indicates a change.

OPERATING CONSIDERATIONS

The high voltages at which the 3A3 is operated are very dangerous. Great care should be taken in the design of equipment to prevent the operator from coming in contact with these high voltages. Particular care against fatal shock should be taken in the measurement of heater voltage. Under all circumstances, circuit parts which may be at high potentials should be enclosed or adequately insulated.

X-radiation. The voltages employed in some television receivers and other high-voltage equipment are sufficiently high that high-voltage rectifier tubes may produce *X-radiation* which can constitute a health hazard unless such tubes are adequately shielded. Relatively simple shielding should prove adequate, but the need for this protection should be considered in equipment design.

Average Plate Characteristic



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