

VOLTAGE REGULATOR

GLOW-DISCHARGE TYPE

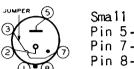
Cathode Cold Maximum Overall Length Maximum Seated Height Maximum Diameter

Base Pin 1-No Connection

Pin 1-No Connection
Pin 2-Cathode
Pin 3-Jumper*

Pin 3-Jumper*
Mounting Position

Bulb.



ST-12 Small Shell Octal 6-Pin Pin 5 - Anode "

4-1/8

3-9/16

1-9/16"

Any

Pin 7-Jumper*
Pin 8-No Connection

BOTTOM VIEW (4AJ)

Maximum And Minimum Ratings Are Absolute Values

RATINGS and CHARACTERISTICS

D-C Anode-Supply Voltage*	105 min.	
D-C Operating Current (Continuous)	{ 40 max. 5 min.	ma. ma.
Ambient Temperature Range	-55 to +90	
Characteristics:		
D-C Starting Voltage (Approx.)	100	volts
D-C Operating Voltage (Approx.)	75	vo1ts
D-C Operating Current (Continuous)	5 to 40	ma.
Regulation (5 to 30 ma.)	3	volts
Regulation (5 to 40 ma.)	5	volts

- # With suitable socket connections, jumper within base acts as a switch to open power-supply circuit when voltage regulator tube is removed from socket.
- * Not less than indicated supply voltage should be provided to insure "starting" throughout tube life.

NOTES:

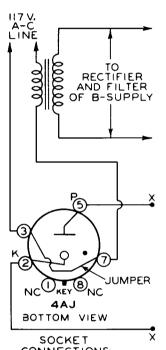
Sufficient resistance must always be used in series with this type to limit the current through the tube to 40 milliamperes under continuous (steady state) operating conditions. During the interval of 5 to 10 seconds which may be required for the regulated tubes in associated equipment to warm up and draw plate current, a maximum current of 100 milliamperes is permissible provided each such starting period is followed by a steady-state operating period of at least several minutes. Unless this precaution is observed, tube performance will be impaired.

In voltage-regulator tubes of the glow-discharge type, regulation is somewhat dependent on past operating conditions. For example, the regulation value of a tube operated for a protracted period at 5 milliamperes and then changed to 35 milliamperes, may be somewhat different from the value that will be obtained after a long period of operation at 35 milliamperes. Likewise, the regulation value may change somewhat after a long idle period.



VOLTAGE REGULATOR

TYPICAL CIRCUIT CONNECTIONS



SOCKET CONNECTIONS FOR OA3/VR75, OC3/VRIO5, AND OD3/VRI50

P = ANODE K = CATHODE NC = NO CONNECTION

	SERIES RESISTOR	×	(A)
TO FILTER (D-C VOLTAGE SUPPLY)	VOLTAGI REGULAT TUBE		LOAD TO BE REGU- LATED
	ERIES ISISTOR	×	-B
TO FILTER	(Ĭ	Ó (в)
REGU	TAGE JLATOR		LOAD TO BE REGU- LATED
TU	BES	Ŷ./ ×	O T

TUBE TYPE	REGULATED SUPPLY VOLTAGE TO LOAD (APPROX. VOLTS)			
	CIRCUIT A	CIRCUIT B		
		- 1	2	
OA3/VR75 OC3/VR105 OD3/VR150	75 105 150	75 105 150	150 210 300	

92CS-6537