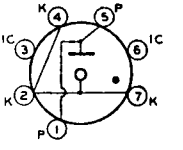
OA2WA Refer to chart at end of section.
OA3 Refer to chart at end of section.
OA3A Refer to chart at end of section.
OA4G Refer to chart at end of section.

OB2
INDUSTRIAL TYPE

VOLTAGE REGULATOR



5B0

Miniature type cold-cathode, glow-discharge tube used in voltage regulator applications. **Outlines section, 5D;** requires miniature 7-contact socket.

MAXIMUM RATINGS (Absolute-Maximum Values)

Average Starting Current♦	75	mA
DC Cathode Current	30	mA
	5 min.	mA
Frequency	0	Hz
Ambient-Temperature Range	−55 to +90	°C

MAXIMUM CIRCUIT VALUES

Shunt Capacitor	0.1	μF
Series Resistor	See Operating Considerations	

CHARACTERISTICS RANGE VALUES FOR EQUIPMENT DESIGN

	Min.	Av.	Max.	
DC Anode-Supply Voltage	133■	—	—	volts
Anode Breakdown Voltage	—	115	133*	volts
Anode Voltage Drop	101●	108	114*	volts
Regulation (5 to 30 mA)	—	1	4*	volts

♦ Averaged over starting period not exceeding 10 seconds. This starting period must be followed by a steady-state operating condition of at least 20 minutes, or tube performance will be impaired.

■ Not less than indicated supply voltage should be provided to insure "starting" throughout tube life.

* Maximum individual tube value during useful life.

● Minimum individual tube value during useful life.

Operating Considerations

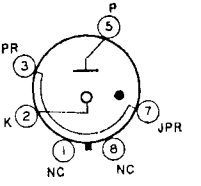
Refer to type OA2.

OB2WA Refer to chart at end of section.

OC2 Refer to chart at end of section.

OC3
INDUSTRIAL TYPE

VOLTAGE REGULATOR



4AJ

Glass octal type cold-cathode, glow-discharge tube used in voltage regulator applications. **Outlines section, 22;** requires octal socket.

MAXIMUM RATINGS (Absolute-Maximum Values)

Average Starting Current♦	100	mA
DC Cathode Current	40	mA
	5 min.	mA
Frequency	0	Hz
Ambient-Temperature Range	−55 to +90	°C

MAXIMUM CIRCUIT VALUES

Shunt Capacitor	0.1	μF
Series Resistor	See Operating Considerations	

CHARACTERISTICS RANGE VALUES FOR EQUIPMENT DESIGN

	Min.	Av.	Max.	
DC Anode-Supply Voltage	133■	—	—	volts
Anode Breakdown Voltage	—	115	133*	volts
Anode Voltage Drop	103●	108	116*	volts
Regulation (5 to 40 mA)	—	2	4*	volts

♦ Averaged over starting period not exceeding 10 seconds. This starting period must be followed by a steady-state operating condition of at least 20 minutes, or tube performance will be impaired.

■ Not less than indicated supply voltage should be provided to insure "starting" throughout tube life.

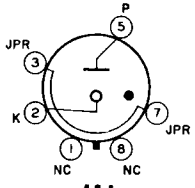
* Maximum individual tube value during useful life.

● Minimum individual tube value during useful life.

Operating Considerations

Refer to type OA2. For circuit diagrams refer to next page.

Refer to chart at end of section. **OC3A**



4AJ

VOLTAGE REGULATOR

OD3

INDUSTRIAL TYPE

Glass octal type cold-cathode, glow-discharge tube used in voltage regulator applications. **Outlines section, 22;** requires octal socket.

MAXIMUM RATINGS (Absolute-Maximum Values)

Average Starting Current♦	100	mA
DC Cathode Current	{40 / 5 min.	mA
Frequency	0	Hz
Ambient-Temperature Range	—55 to +90	°C

MAXIMUM CIRCUIT VALUES

Shunt Capacitor	0.1	μF
Series Resistor	See Operating Considerations	

CHARACTERISTICS RANGE VALUES FOR EQUIPMENT DESIGN

	Min.	Av.	Max.	
DC Anode-Supply Voltage	185■	—	—	volts
Anode Breakdown Voltage	—	160	185*	volts
Anode Voltage Drop	142●	153	165*	volts
Regulation (5 to 40 mA)	—	4	5.5*	volts

♦ Averaged over starting period not exceeding 10 seconds. This starting period must be followed by a steady-state operating condition of at least 20 minutes, or tube performance will be impaired.

■ Not less than indicated supply voltage should be provided to insure "starting" throughout tube life.

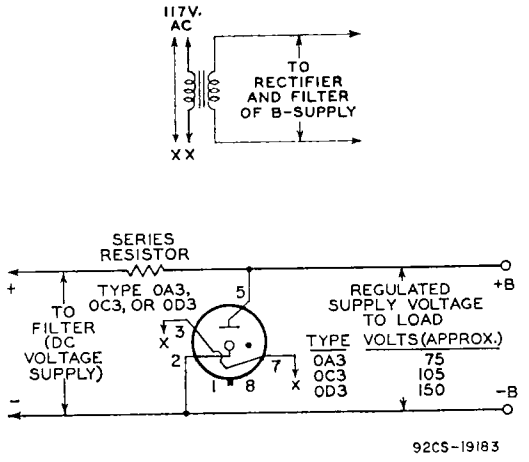
* Maximum individual tube value during useful life.

● Minimum individual tube value during useful life.

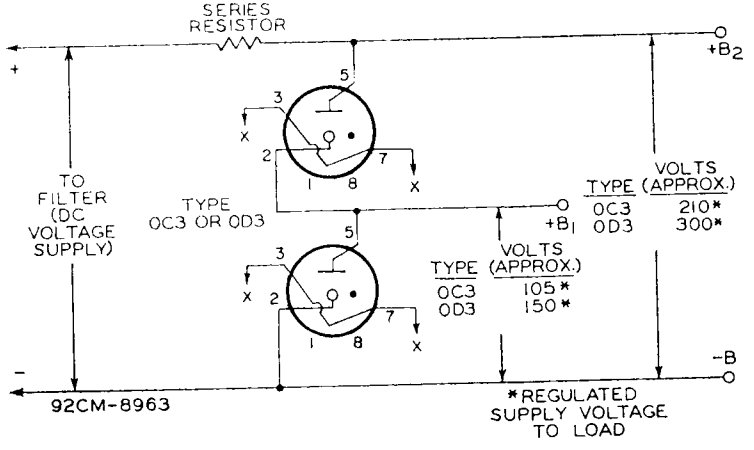
Operating Considerations

Refer to type OA2. For circuit diagrams refer to next page.

Refer to chart at end of section. **OD3A**



Typical circuit to provide regulated supply voltage of approximately 75, 105, or 150 volts to load. Removal of tube from socket removes voltage from load.



Typical circuit using two OC3's, or two OD3's to provide regulated supply voltages of approximately 210 or 300 volts and 105 or 150 volts to load. Socket connections are so made that voltage on load is removed when either tube is taken from its socket.