

## Power Triode

### LIGHTHOUSE TYPE

#### GENERAL DATA

#### Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC) . . . . .	6.3 ± 0.3	volts
Current at heater volts = 6.3 . . . . .	0.750	amp

Cathode Heating Time. . . . . See *Operating Considerations*

Direct Interelectrode Capacitances

(Approx.):<sup>a</sup>

Grid to plate . . . . .	1.3	μμf
Grid to cathode . . . . .	2.2	μμf
Plate to cathode . . . . .	0.03	μμf
Cathode rf terminal to cathode . . . . .	100	μμf

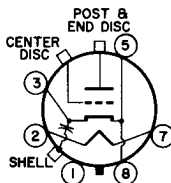
#### Characteristics, Class A<sub>1</sub> Amplifier:

Plate Supply Voltage. . . . .	250	volts
Cathode Resistor. . . . .	200	ohms
Amplification Factor. . . . .	35	
Transconductance. . . . .	5100	μmhos
Plate Current . . . . .	17	ma

#### Mechanical:

Operating Position. . . . .	Any
Maximum Overall Length. . . . .	2-9/16"
Maximum Seated Length . . . . .	1.973"
Maximum Diameter. . . . .	1.312"
Weight (Approx.). . . . .	1.2 oz
Base. . . . .	Small H-Wafer 6-Pin (JEDEC Group 1, No. B6-108)
Basing Designation for BOTTOM VIEW. . . . .	6BY

- Pin 1 - Do Not Use
- Pin 2 - Heater
- Pin 3 - Cathode
- Pin 5 - Cathode
- Pin 7 - Heater
- Pin 8 - Cathode



- Shell - Cathode
- RF Terminal
- Center Disc - Grid Terminal
- Post & End Disc - Plate Terminal

#### Thermal:

Cooling . . . . .	Convection and Conduction
Seal Temperature. . . . .	175 max. °C

← Indicates a change.



# 2C40A

## PLATE-PULSED OSCILLATOR

### Maximum CCS<sup>b</sup> Ratings, Absolute-Maximum Values:

*For frequencies up to 3370 Mc, maximum duty factor of plate pulse = 0.002<sup>c</sup>, and maximum pulse duration of 1.5 microseconds*

PEAK POSITIVE-PULSE PLATE SUPPLY VOLTAGE. . .	1400 max.	volts
NEGATIVE GRID VOLTAGE:		
Average during plate pulse . . . . .	100 max.	volts
PLATE CURRENT:		
Average <sup>c</sup> . . . . .	3 max.	ma
Average during plate pulse . . . . .	2 max.	amp
GRID CURRENT:		
Average <sup>c</sup> . . . . .	1.5 max.	ma
Average during plate pulse . . . . .	1 max.	amp
PLATE DISSIPATION <sup>c</sup> . . . . .	4 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode. .	90 max.	volts
Heater positive with respect to cathode. .	90 max.	volts
PEAK CATHODE-SHELL VOLTAGE:		
Shell negative with respect to cathode . .	90 max.	volts
Shell positive with respect to cathode . .	90 max.	volts

<sup>a</sup> Without external shield.

<sup>b</sup> Continuous Commercial Service.

<sup>c</sup> In any 500-microsecond interval.

## RF POWER AMPLIFIER & OSCILLATOR — Class C Telegraphy

### Maximum CCS<sup>b</sup> Ratings, Absolute-Maximum Values:

*For frequencies up to 3370 Mc*

DC PLATE VOLTAGE . . . . .	500 max.	volts
DC GRID VOLTAGE:		
Negative-bias value. . . . .	50 max.	volts
DC PLATE CURRENT . . . . .	25 max.	ma
DC GRID CURRENT. . . . .	8 max.	ma
PLATE DISSIPATION. . . . .	6.5 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode. .	90 max.	volts
Heater positive with respect to cathode. .	90 max.	volts
PEAK CATHODE-SHELL VOLTAGE:		
Shell negative with respect to cathode . .	90 max.	volts
Shell positive with respect to cathode . .	90 max.	volts

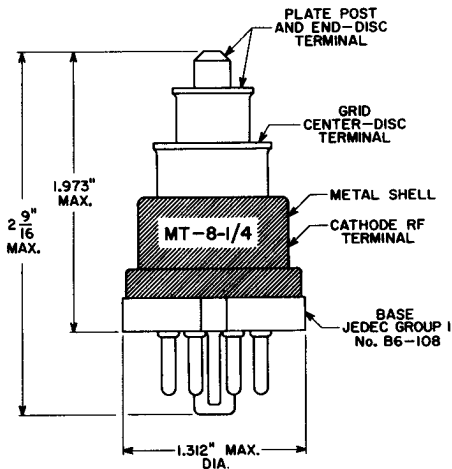
## OPERATING CONSIDERATIONS

In *Plate-Pulsed Oscillator Service*, the plate voltage must not be applied until a minimum of 1 minute after the application of the heater voltage.

In *RF Power Amplifier & Oscillator — Class C Telegraphy Service*, the plate voltage and the heater voltage may be applied simultaneously.

→ Indicates a change.





92CS-11334

