

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.):^a

Grid to plate 1.3 μf

Grid to cathode 2.2 μf

Plate to cathode. 0.03 μf

Cathode rf terminal to cathode. 100 μf

Characteristics, Class A₁ 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

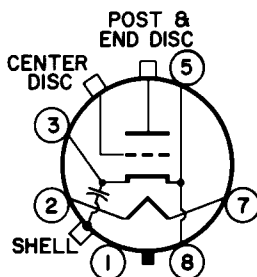
Pin 2 - Heater

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^b Ratings, Absolute-Maximum Values:

For frequencies up to 3370 Mc, maximum duty factor of plate pulse = 0.002^c, 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 ^c	3 max.	ma
Average during plate pulse	2 max.	amp
GRID CURRENT:		
Average ^c	1.5 max.	ma
Average during plate pulse	1 max.	amp
PLATE DISSIPATION ^c	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

^a Without external shield.

^b Continuous Commercial Service.

^c In any 500-microsecond interval.

RF POWER AMPLIFIER & OSCILLATOR — Class C Telegraphy

Maximum CCS^b 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

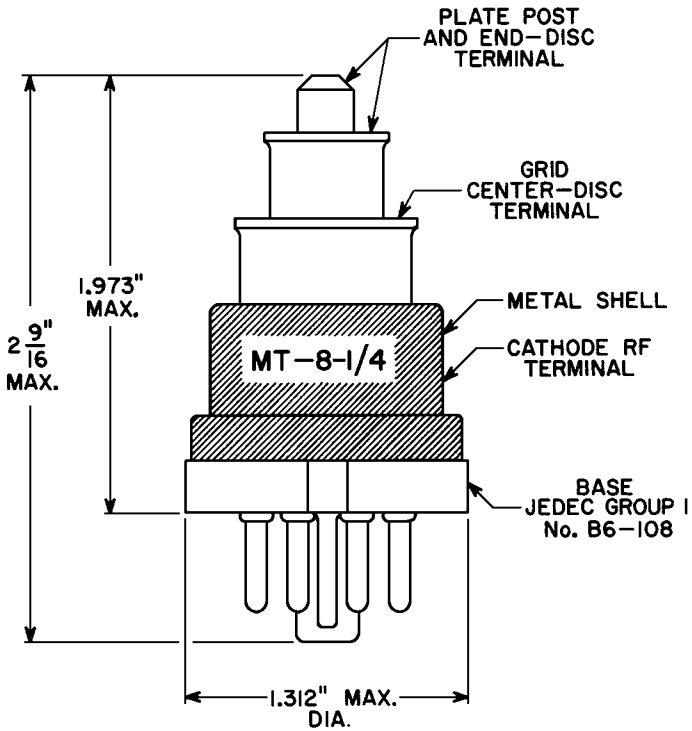
→ OPERATING CONSIDERATIONS

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.

2C40A



92CS-11334

