

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 <i>Operating Considerations</i>	
Direct Interelectrode Capacitances		

(Approx.):^a

Grid to plate	1.3	$\mu\mu\text{f}$
Grid to cathode	2.2	$\mu\mu\text{f}$
Plate to cathode.	0.03	$\mu\mu\text{f}$
Cathode rf terminal to cathode.	100	$\mu\mu\text{f}$

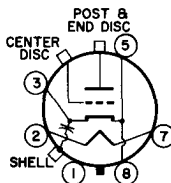
Characteristics, Class A₁ Amplifier:

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.



→ 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

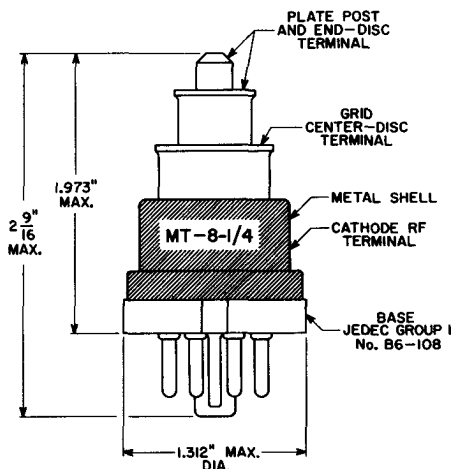
DC PLATE VOLTAGE	500 max.	volts
DC GRID VOLTAGE:		
Negative-bias value.	50 max.	volts
DC PLATE CURRENT	25 max.	ma
DC GRID CURRENT.	8 max.	ma
PLATE DISSIPATION.	6.5 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode. .	90 max.	volts
Heater positive with respect to cathode.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



92CS-11334

