

Eimac

UH50

**THE DATA CONTAINED IN THIS BULLETIN IS
APPLICABLE TO THE EIMAC UH50 TUBE ONLY**

Radiation cooled, ultra high frequency triode embodying all of the superior constructional features common to Eimac tubes but specially designed to be directly interchangeable with certain conventional tubes on the market today.

Tantalum elements specially treated by the exclusive Eimac process, the new Eimac thoriated tungsten filament, elimination of the need for a "getter," and the long, severe exhaust give this tube vastly superior performance capabilities, yet in physical appearance it is almost identical to the conventional tube types. Like all Eimac tubes, UH50 is unconditionally guaranteed against tube failures resulting from gas released internally.

Characteristics

Filament Voltage	- - - - -	7.5 Volts
Filament Current	- - - - -	3.25 Amperes
Amplification Factor	- - - - -	10.6
Grid-Plate Capacity	- - - - -	2.6 mmfds.
Grid-Filament Capacity	- - - - -	2.2 mmfds.
Maximum Plate Voltage	- - - - -	1250 Volts
Maximum Plate Current	- - - - -	125 Milliamperes
Plate Dissipation	- - - - -	50 Watts

Tube must be operated vertically with ample ventilation provided. Seals must be cooled by Radiator Connectors.

Maximum Ratings

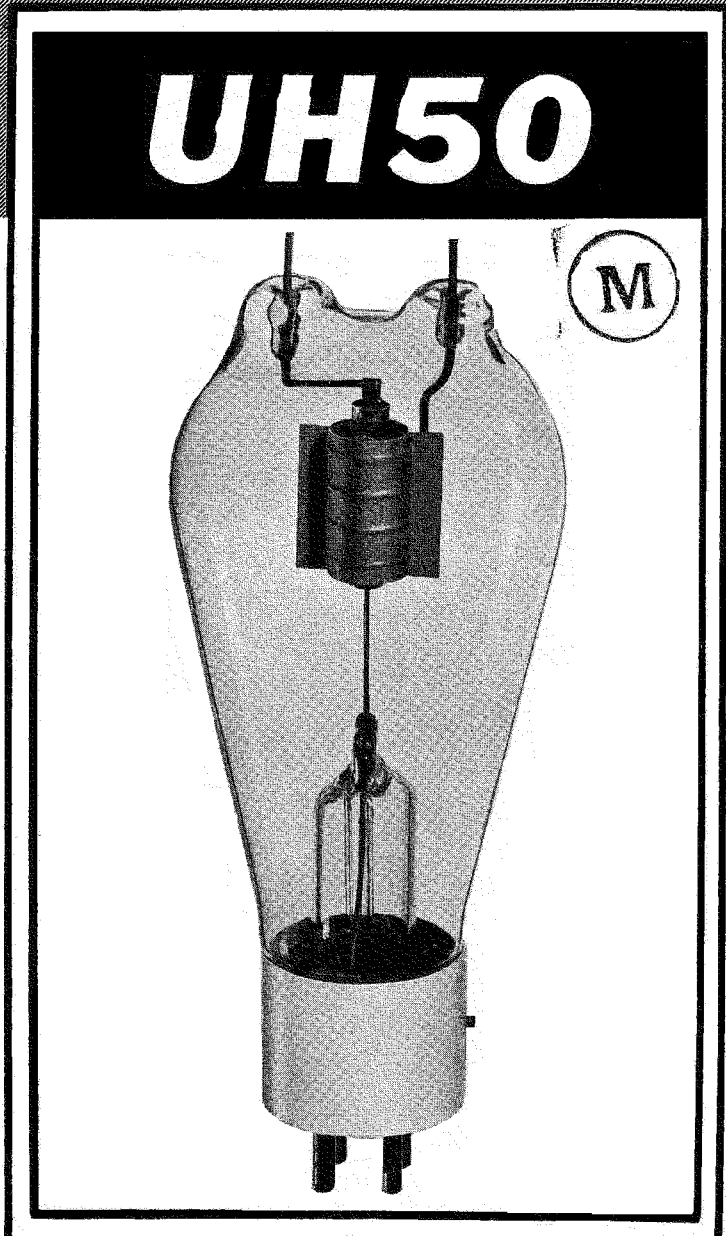
	Intermittent Service Telegraphy Class "B" Audio	Continuous Service Class "C" Telephony
Grid Current (milliamperes)	25	25
Plate Current (milliamperes)	125	125
Plate Dissipation (watts)	50	50
Plate Voltage	1250	1250

As frequency is increased circuit inefficiencies may necessitate a reduction of plate voltage or plate current so that maximum dissipation ratings are not exceeded.

Typical Operating Conditions for Class "C" Telephony

Plate Volts	- - - - -	750	1000	1250
Plate Current (milliamperes)	- - - - -	115	125	125
Grid Current (milliamperes)	- - - - -	20	20	20
Grid Bias (volts)	- - - - -	200	275	325
Power Output (watts)	- - - - -	60	95	115

Excitation power roughly 1/10 the input power.



Typical Operating Conditions for Class "C" Telephony

Plate Volts	- - - - -	1000	1250
Plate Current (milliamperes)	- - - - -	125	125
Grid Current (milliamperes)	- - - - -	20	20
Grid Bias (volts)	- - - - -	-200	-225
Power Output (watts)	- - - - -	94	115

Plate is designed to operate at a cherry-red color on its normal dissipation rating of 50 watts. A perceptible red color is noted at 25 watts. These temperatures are perfectly permissible and no damage will result from such operation. The advantages of using the anode color as a tuning indicator will be readily appreciated as you become familiar with the UH50.