

# Eimac

## 75T

### THE DATA CONTAINED IN THIS BULLETIN IS APPLICABLE TO THE EIMAC 75T TUBE ONLY

Radiation cooled triode designed especially to develop a high power output while requiring a low voltage on the plate. 75T has an entirely new feature in the form of a heat shield directly over the plate. This shield acts as a control to protect the plate-lead seal from excessive heat. Straight line construction provides a great improvement over the conventional tube types in that interelectrode capacities are extremely low and electrical efficiencies are greatly increased. Short, straight leads go from grid and plate directly through the glass bulb — plate at the top and grid through the side — thus providing the maximum of interelectrode insulation. The use of a rugged five-volt thoriated tungsten filament permits extra high power operation. Tantalum elements, specially treated by the exclusive Eimac process, insure long life and trouble-free performance. Like all Eimac tubes, 75T is unconditionally guaranteed against tube failures caused by gas released internally.

#### Characteristics

Filament Voltage	- - - - -	5 Volts
Filament Current	- - - - -	6.5 Amperes
Amplification Factor	- - - - -	10.6
Grid-Plate Capacity	- - - - -	2.3 mmfds.
Grid-Filament Capacity	- - - - -	2.2 mmfds.
Maximum Plate Current	- - - - -	175 Milliamperes
Plate Dissipation	- - - - -	75 Watts

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

#### Maximum Ratings

	Intermittent Service Telegraphy Class "B" Audio	Continuous Service Class "C" Telephony
Grid Current (milliamperes)	30	30
Plate Current (milliamperes)	175	175
Plate Dissipation (watts)	75	75
Plate Voltage	3000	3000

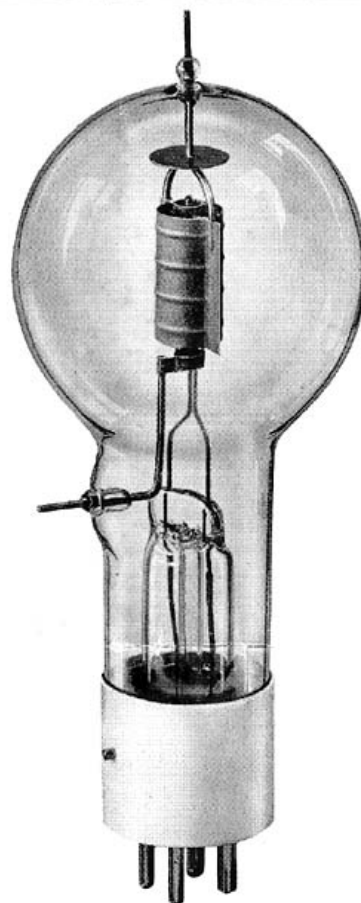
As frequency is increased circuit inefficiencies may necessitate a reduction of plate voltage or plate current so that maximum dissipation ratings are not exceeded.

#### Typical Operating Conditions

##### For Class "C" Telephony and Telegraphy

Plate Volts	- - - - -	750	1000	1500
Plate Current (milliamperes)	- - -	135	175	175
Grid Current (milliamperes)	- - -	30	30	30
Grid Bias (volts)	- - - - -	-150	-200	-300
Power Output (watts)	- - -	70	125	200

Excitation power roughly 1/10 the input power.



#### Class "B" Audio

Plate Voltage	Recommended Plate to Plate Impedance	Power Output
2000	12,500 Ohms	400 Watts
1500	10,000 Ohms	300 Watts
1250	9,000 Ohms	250 Watts
1000	6,800 Ohms	200 Watts
750	6,000 Ohms	100 Watts

Plate is designed to operate at a cherry-red color on its normal dissipation rating of 75 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 75T.

EITEL-McCULLOUGH, Inc.

San Bruno, California

