

Taylor



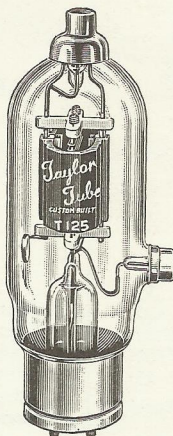
Tubes

T-125

WITH ACCELERATING FINS
125 WATTS PLATE DISSIPATION

\$13.50

(Interchangeable With RCA 810)



The T125 is the tube amateurs demanded to fill the gap between the T55 and T200. It's a mansized tube at low cost and it features a new TAYLOR invention (patent applied for) making possible high efficiency at low plate voltages and with low inter-electrode capacities. Rated conservatively, one tube will handle a full 500 watts input at the maximum ratings of 2000 volts, 250MA. The interelectrode capacities are low, making possible efficient operation on even the highest amateur frequencies—but the use of **accelerating fins** increases the inherent efficiency of the tube, making it far more efficient than others with comparative interelectrode capacities. These fins projecting inward toward the grid and filament effectively produce the very desirable characteristics of higher C tubes without greatly increasing the capacities. Thus this tube is truly unique in that it possesses the **advantages of a low C tube together with the advantages of a higher C tube**—without the disadvantages of either. It is truly a remarkable tube and is a revolutionary step forward in tube design.

At the rated plate dissipation of 125 watts the carbon plate shows no color but the accelerating fins operate at a bright orange color. If the type of operation or input are not such as to result in excessive dissipation, color showing on the plate may be taken as a definite indication that the circuit is less efficient than it should be.

For some time there has been a need for a high frequency tube to replace tubes of the 203A type with the absolute minimum of changes in the transmitter. The T125 fills the needs in a most satisfactory manner. Because of the exclusive TAYLOR Accelerating Fins construction, efficiencies on the order of those obtained with 03A's are possible at the same plate voltages and with the same low grid drive requirements. In addition the plate dissipation is greater than that of an 03A and the plate current rating greater making it possible to increase the power at the same Plate voltage as well as gaining the advantages of low C tube operation at the higher frequencies. In order to replace an 03A type of tube with the T125 it will be necessary only to change the grid and plate connections and to re-neutralize. If the minimum capacity of the neutralizing condenser is too high, plates may be removed. No circuit or bias changes are necessary because the Mu of the T125 is the same as that of an 03A.

GENERAL CHARACTERISTICS

Filament Volts	10
Filament Current, amps.....	4.5
Plate Dissipation, watts.....	125
Amp. Factor	25

Overall Dimensions

Max. Length, Inches.....	8¼
Max. Diameter, Inches.....	3

Interelectrode Capacities

Grid-Plate, mmf	6.0
Grid-Filament, mmf	6.3
Plate-Filament, mmf	1.3
Nonex. Glass	50 watt base

CLASS C TELEGRAPHY

Maximum Ratings

	C.C.S.	I.C.A.S.
D. C. Plate Volts.....	2000	2500
D. C. Plate Current.....	250	250
D. C. Grid Current.....	70	70
D. C. Grid Volts.....	—500	—500
Plate Dissipation, watts.....	125	125#

Typical Operating Conditions

	C.C.S.	I.C.A.S.
D. C. Plate Volts.....	1500	2000
D. C. Plate Current.....	250	250
D. C. Grid Current.....	35	35
D. C. Grid Bias Volts.....	—125	—150
From Grid leak of, ohms.....	3600	4300
Plate Dissipation, watts.....	99	118
Driving Power, watts.....	10	10
Peak AC Grid Volts.....	315	335

It is permissible to allow the plate dissipation to approach twice this value in telegraph service where key down condition exists approximately half the time.

CLASS C TELEPHONY

Maximum Ratings

	C.C.S.	I.C.A.S.
D. C. Plate Volts.....	1750	2000
D. C. Plate Current.....	210	250
D. C. Grid Current.....	70	70
D. C. Grid Volts.....	—500	—500
Plate Dissipation, watts.....	85	125

Typical Operation Conditions

	C.C.S.	I.C.A.S.
D. C. Plate Volts.....	1500	1750
D. C. Plate Current.....	200	200
D. C. Grid Current.....	30	30
D. C. Grid Bias Volts.....	—150	—175
From Grid leak of, ohms.....	5000	5800
Or { Fixed Supply of, volts....	—60	—70
From { Plus Grid Leak of, ohms...3000	3500	3000
Plate Dissipation, watts.....	70	78
Driving Power, watts.....	8	9.5
Peak AC Grid Volts.....	315	345

* The intermittent nature of voice modulation permits the use of the full plate dissipation rating of the tube.

