

T-125

WITH ACCELERATING FINS 125 WATTS PLATE DISSIPATION TRIODE

\$13.50

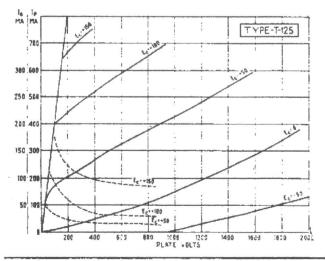
Identical specifications and characteristics as the T-125 except the amp. factor is 48.

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 accel-

erating fine increases the inherent efficiency of the tube, aking 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 lew C tube together with the advan-tages 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 OJA 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 O3A.



GENERAL CHARACTERISTICS

| Filament Volts 10 Filament Current, amps 4.5 Plate Dissipation, waits 125 Amp. Factor 25 | | | |
|------------------------------------------------------------------------------------------------|--|--|--|
| Overall Dimensions | | | |
| Max. Length. Inches | | | |
| Interelectrode Capacities | | | |
| Grid-Piate, mmf6.0 | | | |
| Grid-Filament, mmf6.3 | | | |
| Plate-Filament, mmf | | | |
| Nonex Glass 50 watt base | | | |

CLASS C TELEGRAPHY

Maximum Ratings

| | C.C.S. | I.C.A.S. |
|--------------------------|--------|----------|
| D. C. Plate Volts | 2006 | 2500 |
| D. C. Plate Current | 250 | 250 |
| D. C. Grid Current | 70 | 70 |
| D. C. Grid Volts | 500 | 500 |
| Plate Dissipation, waits | . 125 | 125# |
| | | |

Intlementary Condition

| typical Operating | Condinons | | |
|------------------------------|-----------|----------|------|
| | C.C.S. | 1.C.A.S. | |
| D. C. Plate Volis | 2000 | 2000 | 2500 |
| D. C. Plate Current 250 | 250 | 250 | 250 |
| D. C. Grid Current | 34 | 34 | 35 |
| D. C. Grid Bias Volts125 | -150 | -150 | -200 |
| From Grid leak of, ohms 3600 | 4300 | 4300 | 5700 |
| Plate Dissipation, watts 99 | 118 | 118 | 125# |
| Driving Power, watts 10 | 10 | 10 | 12.5 |
| Peak AC Grid Volts 315 | 335 | 335 | 400 |

It is permissable 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 | 2000 |
| D. C. Plate Current | 250 |
| D. C. Grid Current | 70 |
| D. C. Grid Volts | 500 |
| Plate Dissipation, watts | 125 |

Typical Operation Conditions

| | C.C | C.S. | I.C.I | A.S. |
|-------------------------------------------------------------|-------|------|-------|------|
| D. C. Plate Volts | 1500 | 1750 | 1500 | 2000 |
| D. C. Plate Current | 200 | 200 | 250 | 250 |
| D. C. Grid Current | 30 | 30 | 35 | 35 |
| D. C. Grid Bias Volts | 150 | -175 | -165 | -165 |
| From Grid leak of, ohms | | 5800 | 4700 | 4700 |
| Or {Fixed Supply of, volts From {Plus Grid Leak of, ohms | 60 | 70 | 60 | 80 |
| From (Plus Grid Leak of, ohms | .3000 | 3500 | 3000 | 2500 |
| Plate Dissipation, watts | 70 | 78 | 94 | 120* |
| Driving Power, walts | 8 | 9.5 | 11 | 12 |
| Peak AC Grid Volts | 315 | 345 | 360 | 380 |
| | | | | |

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