This model AL-T350.3 high frequency high voltage output transformer was manufactured to meet the following basic specifications.

- **Primary Volts:** 25 V rms.
- **Secondary Volts:** 300 V rms.
- **Output Power:** 350 watts
- **Frequency Range:** 50K Hz to 250K Hz

Additional parameters of the transformer are:

- **Primary Inductance:** 60 uH
- **Secondary Inductance:** 11 mH
- **Turns Ratio:** 13 : 1
- **Stray Capacitance:** 105 pF (measured at secondary side)
- **Leakage Inductance:** 0.9 uH (measured at primary side)
- **Max. Overshoot Volts:** 130% of rated output
- **Dimensions:** 5" X 4" X 3"
- **Weight:** 1 lb

When operating this output transformer, a secure earth ground connection must be made to the cabinet of the transformer. Mishandling of high voltage transformers can lead to accidental death. Thus, this transformer should only be operated by qualified personnel with electronic knowledge.

The operating frequency range of the above output transformer needs to be strictly confined within the specified frequency range of 50K Hz to 250K Hz.

The leakage inductance can be tuned out by a series capacitance. The value of the leakage inductance may be obtained by shorting the primary winding and measuring the inductance of the secondary winding. The required capacitance can then be calculated by making it the conjugate of the inductive reactance.

When operating this output transformer, it is strongly recommended that the amplitude be increased slowly from zero volts while monitoring the output voltage with an oscilloscope. The output voltage must not exceed 130% of rated maximum output voltage. Over-voltage can damage the transformer.