Data Sheet and Operation Instructions of model AL-T500.8
High Frequency High Voltage Output Transformers

The model AL-T500.8 high frequency high voltage output transformers were manufactured to meet the following basic specifications.

- **Primary Volts:** 25 V rms.
- **Secondary Volts:** 2500 V rms.
- **Output Power:** 500 watts
- **Frequency Range:** 15K Hz to 60K Hz

Additional characteristics of the transformer are:

- **Primary Inductance:** 110 uH
- **Secondary Inductance:** 2.4 H
- **Turns Ratio:** 100 : 1
- **Stray Capacitance:** 35 pF (at secondary side)
- **Leakage Inductance:** 1.2 uH (measured at primary side); 12 mH (measured at secondary side)
- **Max. Overshoot Volts:** 110% of rated output
- **Dimensions:** 8” X 8” X 6”
- **Weight:** 12 lbs

**When operating this high voltage transformer, a secure earth ground connection (by AWG 12 or bigger wires) 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 high voltage experience and knowledge.**

The operation frequency range of the above output transformers needs to be strictly confined within the specified frequency range of 15K Hz to 60K Hz.

When operating these HFHV transformers, it is strongly recommended that the amplitude be increased slowly from zero volts while monitoring the output voltage with a high frequency high voltage probe and an oscilloscope. The output voltage must not exceed 110% of rated maximum output voltage. Over-voltage can damage the transformer.