



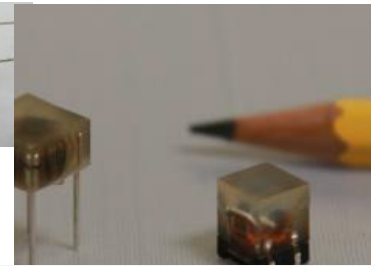
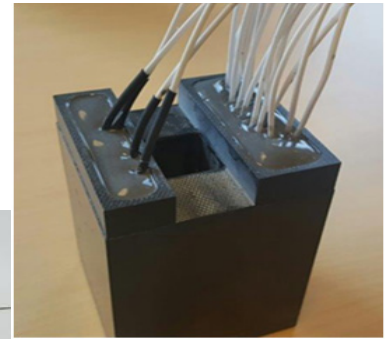
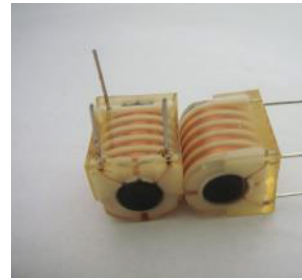
HIGH VOLTAGE CAPABILITIES

Vanguard Electronics has a unique ability to deliver specialty transformers for a wide variety of applications. These designs can be built to your specifications or designed in parallel with your design team. Power ratings from uW to KW are easily achievable. Contact Vanguard with your needs today!



APPLICATIONS

- RF Amplifiers
- Exciter Coils
- Trigger Circuits
- Power Supplies
- Radar Power Supplies



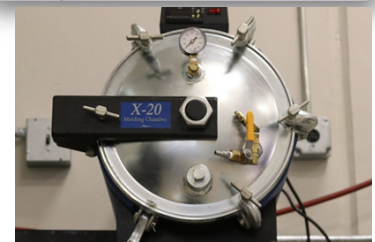
FEATURES

- Corona testing capabilities up to 75,000VDC | 40,000VAC
- Experts in design to support maximum airflow and heat transfer
- Expert design to support maximum airflow and heat transfer
- Custom manufacturing practices developed for achieving CORONA-FREE product
- Equipment to support testing of the design and physical units
- Partial Discharge Detection System (PDDS) for corona testing
- PDDS maintained using HVPD output system (calibrated at 5 pC)
- Experienced staff to support testing and troubleshooting



Design and Manufacturing Capabilities

- DWV: proven designs up to 48kV between windings
- Corona: proven designs up to 10kV AC between windings
- Manufacturing practices developed and proceduralized to achieve corona-free product:
 - Rounded solder joints and tactical lead placement in order to minimize risk of arcing
 - Adequate margins between windings and insulation
 - Insulation protection between windings and over connections
- Unique materials experience to achieve high operating temperatures, dissipation and dielectric
 - Encapsulation material and hardeners
 - Liquid and layer insulation types
 - Specific filler materials selected for reducing CTEs, improving temperature attributes and electrical strength
- Vacuum Impregnation & Pressure Curing
 - Developed in-house equipment in order to varnish encapsulate under vacuum to ensure corona-free product
 - Custom procedures developed for vacuum or pressure curing to ensure void-free product
 - Vacuum drawn as low as 0.1 Torr; selectively chosen pressures for certain varnishes used
- Custom molding materials and capabilities to protect design from environment and provide ability to assimilate design to a custom defined space (shape of final product)



HIGH VOLTAGE



REV A

