Signal Transformer

Custom Transformers Custom Toroidal Custom Inductors Open Frame Enclosed Classic "End Bells" Lead Wires Ultra Sonic Welding Wire Termination Marking bnormal / Fault Testing Potting Encapsulation Packaging SMT Tape and Reel **Tray Packaging** Flat Surface Pick n Place 24 Hr Delivery Connector Interface Custom Lead Forming Bar Coding Through Hole Surface Mount Touch Safe Designs up to 45 KVA UL, CSA VDE, TUV CE, ETL, ITS



The Signal Transformer a division of products has provided innovative application specific solutions and unparalleled service to the electronics industry for more than 50 years.

Establishing the company as the world's leader of wire wound magnetic solutions was the objective in 1959 it is a reality today.



Visit us at signaltransformer.com innovation in wire wound magnetic solutions

quality and innovation in wire wound magnetic technology





Off the shelf or per your specifications

Our rapid supply of standard products and our ability to design and build to special requirements enables Signal's customers to accelerate their *concept to market* phase. Utilizing our in-house CSA shared Manufacturing Testing and Certification program, (SMTC), enables Signal's customers to cut through the regulatory maze. Quick turn prototyping; is Signal's forte.

Creating wire wound magnetic solutions for panel, rack and PCB demands

Our vertically integrated manufacturing process allow us to quickly respond to your application specific design. Using the latest CAD tools your design concept evolves to a finished product on-time. These CAD models can be shared and reviewed for even faster turnaround. Signal Transformer's reputation is built on listening to the customers and designing leading-edge technology solutions. If you have a wire wound magnetic application – we can help!





Standard & Custom board level wire wound magnetic solutions

With industry trends leaning toward smaller and surface mount configurations, Signal Transformer is poised to meet these demands by offering a full line of miniature and ultra miniature wire wound magnetic components in both PTH or SMT termination – Tube and Tape/Reel Packaging

SIGNAL TRANSFORMER - INNOVATION IN WIRE WOUND MAGNETIC TECHNOLOGY

Signal Transformer is celebrating over 50 years of designing and manufacturing highly innovative wire wound magnetic solutions. Utilizing your application specific requirements and our unique capabilities in both design and manufacturing is what sets Signal Transformer apart.

Signal Transformer - commitment to quality

The competitive postures of today's markets make Product Quality a critical factor; no matter the product, or component. At Signal Transformer we subscribe to continuous quality improvement spurred onward by growing urgency for optimized products, adding customer value through quality, cost effectiveness, reliability and productivity

Signal Transformers - distinctions

As a global manufacturer, Signal Transformer can bring your product to market *faster*. Prototype components can quickly be designed, manufactured and assembled in our NY manufacturing facility. Both pre-production and high volume components are manufactured in our Dominican Republic facility and if your design requirements demand the production of cost sensitive components near your Euro Asian sub-cons, we offer support from our manufacturing facilities in China.

The Signal Transformer - product line

We offer a complete product line of standard wire wound magnetic products and are quick to develop customer-specific products catering to our customer's needs and their new applications.

Our core competency relies on our strong engineering, manufacturing and marketing teams, our wire wound magnetic product base, our modern, mechanized, high quality manufacturing outlets, strong technical sales team and our customer-specific product development.

Full Line of board mount and chassis mount wire wound magnetic solutions



Custom Capabilities



Our wire wound products are found in every market

Signal Transformer - markets

The Signal product offering has found it's way into all major market segments including, but not limited to, Security / Fire & Safety, Medical / Dental / X-Ray / Industrial / Process Control, Elevators, Energy Management, White goods, Power Supply / Power conversion, Test & Measurement, Lighting, Entertainment / Gaming, HVAC, Factory Automation and much more, contact customer service for a market profile

In-House Certification Laboratory

Signal Transformer maintains an in-house ISO 17025 certified laboratory that enables us to participate in CSA's "Shared Manufs Testing & Certification (SMTC) This program makes it possible to certify and use the CSA / cCSAus mark on new designs within days.





For more than 15 years, Signal Transformer has been able to both simplify and expedite the transformer Certification process for our clients by utilizing CSA's SMTC Program. Most recently this prestigious program has undergone significant change. Manufacturer's utilizing this program must now qualify to the IEC/ISO 17025 standard for Testing Laboratories.

What is the SMTC and why is it of significance to Signal and our customers? This program allows designated Signal Transformer engineering personnel to test and evaluate both catalog and custom transformers to CSA and UL transformer standards. Upon successful completion of tests, the results are supplied to CSA whereupon the CSA engineer reviews the results and grants Signal the authorization to "certify" the component. This process may require as little as 3 days after transformer samples are provided to Signal's engineering department.

Signal Transformer is the only transformer manufacturer in the United States having such accreditation to the SMTC program. In addition, Signal Transformer's engineering director is one of four registered Delegate's on the United States National Committee, (USNC) Technical Committee, (TC) 96 for the International Electro-technical Commission, (IEC). National Committee Delegates have the responsibility and authority to revise and mandate changes to the relevant IEC standards.

While , minimizing the costs and lead time associated with the certification of custom transformers. USNC Delegates represent the voice of US transformer manufacturers and have intimate firsthand knowledge of any pending changes and or revisions to the relevant IEC standards. Having this association allows Signal's engineering staff to maintain vigilant standards oversight.

In-House Certification Laboratory

One of the unique advantages Signal Transformer bring to the wire wound magnetic engineer is our inhouse ISO 17025 certified laboratory that enables us to participate in the CSA Shared Manufacturers Testing and Certification, (SMTC) program. This program makes it possible to certify and use the **CSA** /c**CSA**us mark on new designs within days.

UL1411 – Audio, Radio and Television UL60601-1 – Medical and Dental Equipment UL5085-1 parts 2 and 3, General Purpose and Class 2 Current UL1563- Hot tubs and Spas UL 916- Intrinsically Safe Circuits UL 864 Fire Alarm Detection UL 1069-Nurse Call Systems UL 1238-Liquid Dispensing Equipment UL 60950-Information Technology Equipment UL 924-Emergency Lighting UL 1059- Terminal Blocks **UL 310-Electrical Quick Connect** IEC 61558-1-2 Isolating and Safety Isolating Transformers IEC 60601-1 Electro Medical Equipment IEC 61010B-1 Electrical Measurement and Test IEC 60065 Audio Video and similar IEC 60335 Household Appliances IEC 60950-Information Technology IEC 1210 Flat Blade Quick Connect IEC 60998-1-2 Screw type Binding Clamp connections. CSA C22.2#66-1,2,3 General purpose and Class 2 Transformers CSA C22.2# 950 / 60950 Information Technology CSA C22.2 No 158-1987 Terminal Blocks CSA C22.2 No. 153-M1981-Quick Connect Terminals VDE 0550 / 0551, Isolating Transformers VDE 0750, Reactor and Auto Transformers

CE







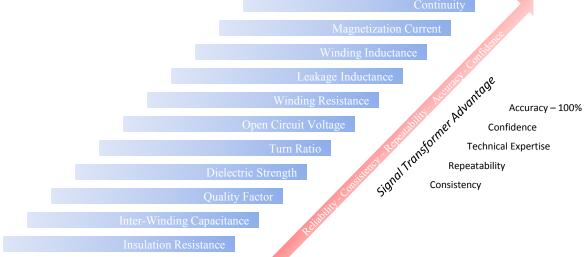




Testing – Routine Production Tests

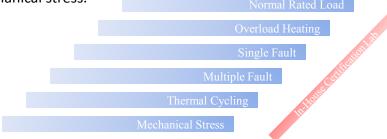
Signal Transformer tests and evaluates your next wire wound magnetic solution.

Routine Production Tests: These tests are conducted on 100% of all products manufactured at Signal Transformer. Routine tests confirm the accuracy and functionality of the component as designed and include parameters such as:



Type Testing: These tests are conducted annually on components having Third Party Certifications. Verifying the construction and performance parameters, type tests assure continued regulatory compliance of components to the applicable domestic and or international standards. In addition to the criteria of the standard Routine Production Tests, type testing provides for the investigation of raw material type and thickness, creepage and clearance distances and evaluates the impact of any revisions or changes.

Regulatory Qualification Testing: In addition to being subjected to the same criteria contained in the Routine Production Test and the Type test, components intended to be submitted to Third Party Test houses or Regulatory authorities are subjected to tests that may include but are not limited to; normal rated load, overload heating, single fault, multiple fault, Thermal cycling and mechanical stress.



Signal launches the first wire wound magnetic worksite

When you log into <u>www.signaltransfomer.com</u> now you can get access to the options and features you need when designing, specifying and evaluating transformers, Inductors and Chokes. The interactive worksheets and part configurator help find the right part for the right application

Signal Transformer website advantage

A website designed by engineers for engineers. Our site has the design functionality wire wound design engineers have come to expect.

- Searching and comparing by application specific attributes
- Application matrixing, searching and comparison
- · Search by market segments or industries
- Fast downloads of data sheets and technical content
- Direct interface to the most experienced design engineers

• Capabilities, here the power conversion engineer has first hand insight into our capability for quickly modifying standard products or designing an application specific custom

Signal Transformer is celebrating 60 years of designing and manufacturing highly innovative wire wound magnetic solutions Utilizing your application specific requirements and our unique capabilities in both design and manufacturing is what sets Signal Transformer apart.

In-Stock wire wound magnetic products

The Signal Transformers *Advantage*

Our PRONTO shipment program is simple. We ship off-the-shelf products within 24 hours and, in most cases, the same day! Signal maintains an extensive finished goods inventory that enables us to ship small volume orders from stock within 24 hours.

We are able to make this commitment because we constantly replenish our inventory through a computerized MRP system that computes inventory/production schedules to match our customer's requirements. Large production orders are conservatively scheduled to ensure meeting JIT or any delivery requirements, even those with tight lead times. In fact, each year over 20,000 orders are shipped to satisfied customers – on time. Every time.

Signal Transformers has also partnered with world class distribution channels.





The Signal Transformer Challenge:

Test us! From the most cost effective simplistic power conversion component to highly extremely specialized platforms for demanding applications, Signal's staff has the skills, the resources and the desire to make it happen.

Ask us! Whether you require one component for that classic Fender amplifier or a million pieces for that new energy efficient solar conversion system, we can develop it.

Believe us! Millions of our time tested components have been functioning flawlessly 24/7 at full duty for decades. Being part of the capacity and the technical expertise.

Try us! Simply contact our vast distribution network or our technical sales and engineering staff with your power conversion requirements. needs. We can help!



Bel (www.belfuse.com) and its subsidiaries, including Signal Transformer, are primary engaged in the design, manufacture and sales of products used in power conversion. Products include linear transformers, power toridal transformers, high frequency inductors, chokes and custom designs. Signal Transformer operates facilities around the world. Visit us at...

www.signaltransformer.com