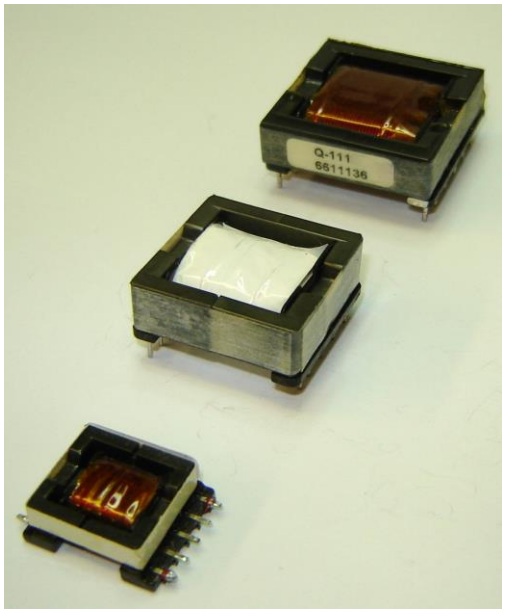
Switch Mode Transformers



BUILT WITH SOLID CONSTRUCTION

All switch mode transformers are constructed using components and manufacturing techniques that provide voltage isolation between the primary and secondary windings.

MANUFACTURED IN THE US

We are proud to be a US based manufacturer operating in the United States. Custom Coils has been manufacturing switchmode type transformers for almost 30+ years.

Our switch mode transformers are used to power:

- DC/DC Converters
- Biomedical Power Supplies
- Plasma / Ion Generators
- HV Switching Power Supplies
- Sensitive Test Equipment

FEATURES AND SPECIFICATIONS

Power Output: up to 1KW

Switching Frequencies: Up to 500KHz

Topology: Configurable for each application

- Push-Pull
- Flyback
- Forward Converter
- Half-Bridge/Full-Bridge P-P

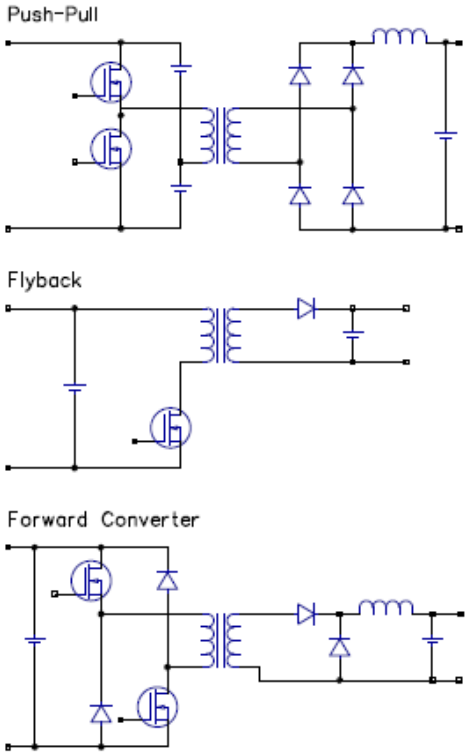
Other Design Elements:

- Through-hole or surface mount bobbins
- Isolated output voltages
- Encapsulation for isolation & protection
- Split Primaries
- Dual Secondaries
- Auxiliary and BIAS winds

Switch mode power supplies have become prevalent in all industries. These power supplies have become popular in electronics because they typically can be smaller and lighter weight compared to their predecessors. Designers have embraced this miniaturization to produce smaller yet higher output power supplies. Custom Coils can work with the designer that has selected a switcher IC and wishes to design a transformer that supports the topology and switching frequency that is required for their design. Once the transformer is designed, Custom Coils can provide prototypes and manufacture the transformer.

CUSTOM COILS

Switching Topologies



Push-Pull

Characterized as the most efficient of the designs, it does require more components and is typically labeled more expensive than other designs. The push-pull only has one isolated output but can support output powers up to several kW's depending on what flavor of push-pull is used.

Flyback

Identified by multiple isolated outputs and its remarkably low number of components compared to other switchers, the flyback is more a two winding storage inductor than a transformer. It saves energy during transistor on-time and transfers that energy to the secondary during the transistor off-time.

Forward Converter

Characterized as having only one isolated output up to a couple 100W. The forward converter can be configured with either one or two switching transistors.

Switch Mode Transformers

- Switch mode transformers can be designed to operate efficiently with the switcher IC being used in your circuit.
- Turn Ratios can be adjusted to provide various voltages needed for specific application.
- Many different mounting options are available and the switch mode transformer can be configured to function efficiently in almost any design.

KEY DESIGN ELEMENTS

Isolated Outputs

Surface Mount or Through-hole

Support for Different Topologies

Configurable Turns Ratio

Adjustable Frequencies

Auxiliary and BIAS Wind Compatible

APPLICATION SUPPORT

Please contact our engineers to help select the correct switch mode transformer you need. Designs can be customized to meet the specific design requirements of your application.

PRODUCTION TESTED

All switch mode transformers manufactured at Custom Coils are 100% tested on one of our Voltech AT3600 Transformer Testers.

TURNKEY SOLUTIONS

Power output, topologies, and switching frequencies can be designed to accommodate the unique environment and space restrictions of your product.

For more information on any of our products or services please visit us on the Web at: www.customcoils.com