Transverse Shield Wire

Description

- Transformer design including a transverse shield wire (N_T) to reduce electromagnetic interference (EMI)
- The transverse shield wire (N_T) is coupled between a switching node (pin P3) and a winding of the transformer (primary winding N_P)
- The transverse shield wire is placed on the bobbin and extends in a direction parallel to the axis of the bobbin

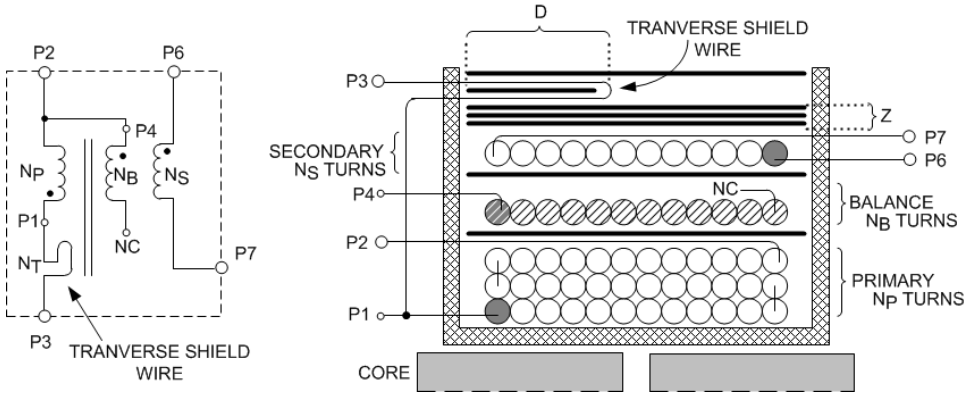

Figure 1. Schematic of a transformer with a transverse shield wire and corresponding winding diagram

Benefits

- Reduces common-mode EMI while maintaining a low profile for the transformer in a flyback converter
- Can replace a shield winding generally wound perpendicular to the axis of the bobbin that would consume window area
- **Could be used with:** Low profile power converters

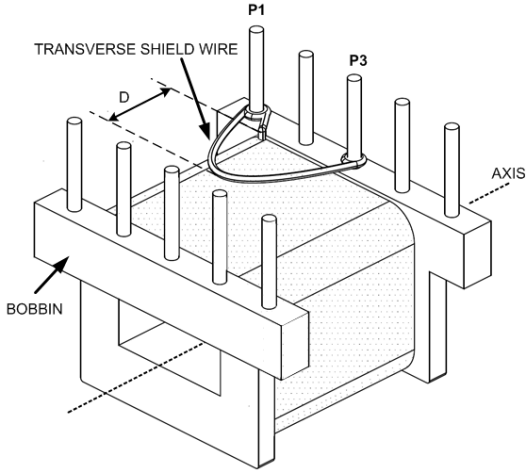

Figure 2. Example transformer with a transverse shield wire

World Headquarters 5245 Hellyer Avenue, San Jose, CA 95138, USA, Main: +1-408-414-9200
Customer Service Phone: +1-408-414-9665, Fax: +1-408-414-9765, Email: info@power.com
On the Web www.power.com