Premier Magnetics’ Transformers Designed for TI’s Fly-Buck™ Converters

Transformer topology and electrical characteristics are configured specifically for use with Texas Instruments’ Fly-Buck isolated synchronous buck converters

Lake Forest, Calif.—November 20, 2014—Premier Magnetics, global producer of high-quality magnetic components, has introduced a line of transformers specifically designed to complement the Texas Instruments LM5017 family of Fly-Buck™ converters. The Premier Magnetics Fly-Buck transformers’ topology and electrical characteristics are designed to provide fast and simple implementation of the Fly-Buck circuit for two or four isolated outputs. The devices feature 1500 Vrms isolation and their low-leakage inductance and low inter-winding capacitance contribute to improved overall power conversion efficiency. For example, the TI LM5017 demo board utilizing a Premier Magnetics TSD-3425 transformer has a demonstrated efficiency of greater than 90%.

Expanding Premier’s popular TSD Series, the models in the Fly-Buck series are offered to support three popular Fly-Buck circuit configurations. All handle 15-40 Vac inputs and frequencies up to 600 kHz. The Model TSD-3424, in an EP13 package, provides quad outputs (2x +5@100 mA / 2x +15@50 mA); the dual output TSD-3425 (+5@250 mA / +5@250 mA) and TSD-3426 (+5@150 mA / +5@150 mA) are each in a smaller EP10 package.

“The new line of Fly-Buck transformers is another example of Premier Magnetics’ commitment to providing well-engineered magnetics solutions to the power electronics design community,” said Jim Earley, president of Premier Magnetics. “Our goal is to simplify switching power supply optimization by providing our customers with reference designs and recommended filters and power inductors to complete the task.”

The “Fly-Buck” circuit developed by TI offers design and board space advantages in power supply designs by utilizing a synchronous buck converter with coupled transformer windings to create isolated outputs. In contrast, traditional “flyback” converter circuitry requires optocouplers or auxiliary windings for feedback regulation and is bulky and complex to design. The Fly-Buck circuit is a cost-effective solution in a wide range of end use applications requiring ac/dc or dc/dc conversion, including process control, instrumentation, solar, telecom and military.

Price: $0.48 - $0.52 in OEM quantities
Availability: Samples in stock for immediate delivery
Delivery: 8 weeks, ARO for OEM quantities

About Premier Magnetics
Incorporated in 1991, Premier Magnetics (www.premiermag.com) is a leading, multinational company producing and marketing a broad range of magnetics components, including telecom magnetics, power conversion magnetics and DC/DC converters. Committed to providing the highest quality products and shortest cycle times at the most competitive cost in the industry, Premier provides products to the communications, computer, industrial and medical industries, as well as various government and military agencies around the world. Sales and distribution offices are worldwide, with manufacturing locations in Southern California, Taiwan and China.

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