TAIYO YUDEN

March 3, 2005

Taiyo Yuden: Introduces Wound Chip Inductor Blending Low Rdc and High Current Characteristics in a Single Device

Drop-in Replacement for 3225 Size Devices Requires No Modification to Land Pattern Design



Taiyo Yuden Co., Ltd., today announced the release of the new LB3218 (external dimensions: 3.2 x 1.8 x 1.8 mm) Wound Chip Inductor for use in IC power supply lines. The new product is the latest addition to the company's LB and LBC Series Wound Chip Inductors. The LB3218 Wound Chip Inductor offers improved ease of use by blending low Rdc and high current characteristics in a single device, thereby eliminating the need to choose from separate low Rdc and high current type devices. Taiyo Yuden is currently shipping samples of the new product at a price of 20 yen per unit. Mass production of the LB3218 Wound Chip Inductor is scheduled to commence in March 2005.

Compared with Taiyo Yuden's 3225 size (external dimensions: 3.2 x 2.5 x 2.2 mm) wound chip inductors, the LB3218 Wound Chip Inductor is 40% smaller by volume, has a 30% smaller device footprint, and is 20% thinner. The thinner, lighter LB3218 Wound Chip Inductor can be used as a drop-in replacement for 3225 size devices, requiring no modification to the land pattern design

Wound inductors usually present considerable challenges in terms of designing for both low Rdc and high current characteristics. Until now, customers had to choose between separate low Rdc and high current type devices.

Taiyo Yuden's goal in designing the new LB3218 Wound Chip Inductor was to deliver low Rdc and high current characteristics in a single device, for improved ease of use by customers. The new product was made possible by redesigning the ferrite-resin composite used in Taiyo Yuden's LB and LBC Series Wound Chip Inductors. The shape of the ferrite core and the thickness and number of windings were specifically designed to produce the highest possible rated current and lowest possible Rdc in a 3218 size device. The LB3218 Wound Chip Inductor successfully delivers the same characteristics previously found in two separate products, the High Current Type 3225 Wound Chip Inductor and Low Rdc Type 3225 Wound Chip Inductor.

The smaller dimensions of the LB3218 Wound Chip Inductor make it ideal for use in digital still camera and digital camcorder applications, where smaller and thinner designs are desired.

The LB3218 Wound Chip Inductor can be used as a drop-in replacement for 3225 size devices, with no need for modification of the land pattern design. The new product is ideal for use in applications where it is difficult to implement new circuit designs, which can be the case with VCRs and other mature equipment formats that have dropped in price. The LB3218 Wound Chip Inductor can be used without the cost of additional design work and other labor.

TAIYO YUDEN

TAIYO YUDEN

Like other products in Taiyo Yuden's line of LB and LBC Series Wound Chip Inductors, the LB3218 Wound Chip Inductor can be mounted without directional influence, for ease of mounting. This offers a clear advantage over conventional products whose electrode shape requires mounting in one direction.

Specifications for LB3218 Wound Chip Inductor

Type	Inductance	Max. rated current	Rdc	Dimensions (mm)
	(μH)	(mA)	(Ω)	LxWxH
LB3218	10	300	0.25	3.2 x 1.8 x 1.8

