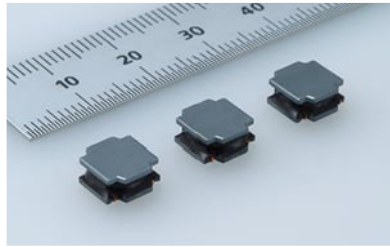


December 8, 2005

8mm Square Wire-Wound Power Inductor Achieves Rated Current of 3.4A, Highest in the Industry

— Choke Coil for DC-DC Converters Used in Thin Flat-Screen TVs —



Taiyo Yuden has announced the launch of the NR8040 series (8.0 x 8.0 x 4.0mm), an 8mm square wire-wound power inductor with a high-current capability of 3.4A (at the inductance of 10 μ H). The new product achieves the highest rated current for its size in the industry.

The product is to be utilized as a choke coil for DC-DC converters used in LCD-TVs, plasma TVs, car navigation systems, and home video game consoles, etc. In particular, LCD-TVs, plasma TVs, and other thin flat-screen TVs are becoming progressively larger with higher resolution, resulting in rising demand for DC-DC converters capable of providing high current, as well as compact size for slimmer chassis of those TVs. As a result, there is a corresponding need for inductors capable of larger current and more compact size for use in these DC-DC converters. For such inductors, important elements include size, a high rated current, and low Rdc, with particularly strong demand for a high rated current. The way to achieve a higher rated current is to broaden the surface cross-section of the core, while a lower Rdc can be obtained by thickening the winding wire. Unfortunately, a larger size is unavoidable.

In response, Taiyo Yuden took the simple sleeveless structure that successfully eliminated all wasted space in the low-profile type wire-wound power inductor and applied it to this product. The result was a rated current of 3.4A, which compares to a 10mm square type, being successfully applied to an 8mm product. Production is scheduled to begin in December 2005 at the Taiyo Yuden (Philippines) overseas production site, at 3 million units per month. The sample price is 30 yen per unit.

The NR8040 series lineup is as follows.

Item	Inductance	Rdc [Ω]	Rated Current [A]max.
NR8040T 0R9N	0.9 μ H \pm 30%	0.006	11.8
NR8040T 1R4N	1.4 μ H \pm 30%	0.007	9.3
NR8040T 2R0N	2.0 μ H \pm 30%	0.009	7.8
NR8040T 3R6N	3.6 μ H \pm 30%	0.015	5.6
NR8040T 4R7N	4.7 μ H \pm 30%	0.018	5.0
NR8040T 6R8N	6.8 μ H \pm 30%	0.025	4.0
NR8040T 100M	10 μ H \pm 20%	0.034	3.4
NR8040T 150M	15 μ H \pm 20%	0.050	2.7
NR8040T 220M	22 μ H \pm 20%	0.066	2.2
NR8040T 330M	33 μ H \pm 20%	0.10	1.9
NR8040T 470M	47 μ H \pm 20%	0.15	1.5
NR8040T 680M	68 μ H \pm 20%	0.23	1.2
NR8040T 101M	100 μ H \pm 20%	0.29	1.0