

Power Supply Product

40A Surface Mount DC-DC Converter has a Low 10.2mm Profile

December 2015

TDK Corporation announces the introduction of the TDK-Lambda iAH series of POL (Point of Load) non-isolated, DC-DC converters. This surface mount part has an ultra-low profile of 10.2mm. Rated at 40A, the iAH can deliver a wide adjustable output voltage from either a 5V or 12Vdc bus.

The iAH series can provide output voltages from 0.7 to 5.5V, accepts a wide input range of 3V to 17V and has an efficiency of up to 96%. Capable of delivering up to 40A or 150W, the converters can operate in high ambient temperature, low airflow environments with minimal power derating. The series is designed to meet a wide range of applications, including servers, routers, other Information & Communication Technology (ICT) equipment, semiconductor manufacturing, measurement and industrial equipment.

The surface mount converters occupy just 0.69 square inches of board space, measuring 1.3 x 0.53 x 0.4 inches (33mm x 13.5mm x 10.2mm) with a weight of just 12 grams. As with all TDK-Lambda's DOSA compatible footprint POLs, the iAH does not need externally mounted loop tuning components and has excellent transient response to load changes.

Product features include output trim adjustment, power good, remote sense and a choice of positive or negative logic remote on/off. Full protection, with auto-recovery, is provided against input under-voltage, output short circuit and over-temperature. All models are certified to UL/CSA 60950-1, IEC/EN 60950-1 and carry the CE mark for the Low Voltage and RoHS2 Directives.

More information can be obtained at the following TDK-Lambda Americas website, <http://www.us.tdk-lambda.com/lp/products/dosa2-series.htm>, or by calling 800-LAMBDA-4. Product availability for the iAH converters can be found via the link to TDK-Lambda's distributor network (see "Check Distributor Stock") at <http://www.us.tdk-lambda.com/lp/>.

Major applications

Servers, routers and other ICT equipment, semiconductor manufacturing equipment, measurement equipment and other industrial equipment

Main features and benefits

- High efficiency (Up to 96%)
- Compact 33mm x 13.5mm x 10.2mm size and very low profile
- Excellent transient response
- No requirement for external tuning components

Major specifications

Model		iAH12040A007V
Input voltage range	Vdc	3 to 17V
Output voltage range	Vdc	0.7 to 5.5V
Maximum output power	W	150W
Efficiency	%	96% (5V output, 12V input, 100% loading)
Mounting type	-	Surface Mount
Size (L x W x H)	mm	33 x 13.5 x 10.2

About TDK Corporation

TDK Corporation is a leading electronics company based in Tokyo, Japan. It was established in 1935 to commercialize ferrite, a key material in electronic and magnetic products. TDK's portfolio includes electronic components, modules and systems* which are marketed under the product brands TDK and EPCOS, power supplies, magnetic application products as well as energy devices, flash memory application devices, and others. TDK focuses on demanding markets in the areas of information and communication technology and consumer, automotive and industrial electronics. The company has a network of design and manufacturing locations and sales offices in Asia, Europe, and in North and South America. In fiscal 2015, TDK posted total sales of USD 9.0 billion and employed about 88,000 people worldwide.

* The product portfolio includes ceramic, aluminum electrolytic and film capacitors, ferrites, inductors, high-frequency components such as surface acoustic wave (SAW) filter products and modules, piezo and protection components, and sensors.

About TDK-Lambda Corporation

TDK-Lambda Corporation, a group company of TDK Corporation, is a leading global power supply company providing highly reliable power supplies for industrial equipment worldwide. TDK-Lambda Corporation meets the various needs of customers with our entire range of activities, from research and development through to manufacturing, sales, and service with bases in five key areas, covering Japan, Europe, America, China, and Asia.

For more details, please pay a visit to <http://www.tdk-lambda.com/>

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