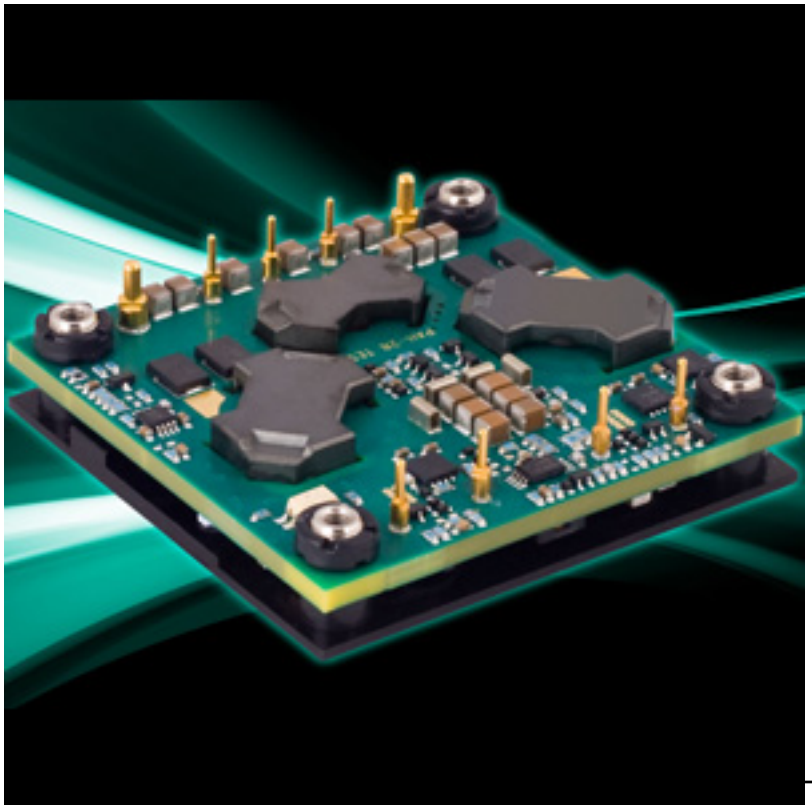
450-watt, baseplate-cooled half-brick DC-DC converter achieves 93.5% efficiency



The Murata Power Solutions PAH series of high efficiency, medium-power DC DC converters are capable of delivering up to 450 Watt output. These compact modules, measuring just 58 x 61 x 12.7 mm, comply with the DOSA half-brick footprint. Ideally suited for power amplifiers, wireless networks, and other telecom applications, the PAH series' mechanical design incorporates a baseplate that provides conduction cooling for demanding thermal environments found in outdoor sealed box applications and telecommunications equipment cabinets.

The PAH series has been optimized to meet the demanding dynamic load requirements for power amplifier applications. Typically, power amplifiers can switch very quickly from very light load to maximum load conditions. In addition, the electrical design of the modules offers tight line and load regulation together with low Vout ripple/noise.

The PAH series was designed to deliver full output power over the entire telecommunications input voltage range of 36 - 75 VDC. The PAH-28/16-D48 module will provide 28 VDC output at up to 16 A (450W). The output can be trimmed over a wide range from 16.8 to 32.2 VDC, meeting the requirements of many standard and non-standard applications. Other models available include the PAH-28/12.5-D48, providing 12.5 A / 350 Watt output, and the PAH-53/8.5-D48, which has a 53 VDC / 8.5 A output rated at 450 W.

Safety features such as thermal shutdown, output over-voltage, input under-voltage, and short circuit protection are included across the entire PAH range. All models are certified to UL/EN 60950, CSA-C22.2 with Input to output isolation rated at 2250 VDC, Basic insulation.

In OEM quantities, prices to $34.00, with delivery from stock to 16 weeks.

www.murata-ps.com [1]

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