1.5W Isolated Low Noise DC-DC µModule Converters Include Transformer

Linear Technology Corporation introduces the LTM8047 and LTM8048 1.5W output DC/DC µModule converters with 725VDC galvanic isolation in a 9mm x 11.25mm x 4.92mm BGA (ball grid array) package. All components, including the transformer, control circuitry and power switches are housed in a small enclosed BGA package for superior interconnect reliability in high vibration applications. These compact and reliable products break ground loops in applications such as industrial, avionics and instrumentation equipment. Both devices operate from an input voltage of 3.1V to 32V, delivering a regulated output voltage on the secondary side, adjustable from 2.5V to 12V (LTM8047) and 1.2V to 12V (LTM8048). The LTM8048 includes a low noise linear post regulator that reduces the output ripple noise to 20µVrms at 300mA.

The LTM8048's isolated post regulator delivers an output voltage accuracy of 2.5%. The low noise performance of the LDO delivers a clean supply rail, improving the performance of high accuracy mixed signal converters. Additional features available on both products include overcurrent protection and adjustable soft start.

The LTM8047 and LTM8048 are available for immediate delivery from stock in three temperature grades, E and I from
-40°C to +125°C and MP for the -55°C to +125°C operating junction temperature range. Pricing starts at $8.25 and $8.75 each for 1,000-piece quantities for the LTM8047 and LTM8048, respectively. For more information, visit www.linear.com/product/LTM8047 [1] and www.linear.com/product/LTM8048 [2].

Summary of Features: LTM8047/LTM8048

- 725VDC Isolation Tested
- 1.5W Output Power
- Wide 3.1V to 32V Input Voltage Range
- Adjustable Output Voltage 2.5V to 12V
- 80% / 75% Efficiency (24VIN to 5VOUT) for LTM8047 & LTM8048, Respectively
- Low Noise LDO Output with 20µVrms Ripple at 300mA (LTM8048 only)
- Up to +125°C Operating Junction Temperature
- Compact, Thermally Enhanced
- 9mm x 11.25mm x 4.92mm BGA Package

www.linear.com [3]

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http://www.ecnmag.com/product-releases/2011/12/15w-isolated-low-noise-dc-dc-%C2%B5module-converters-include-transformer

Links:
[1] http://www.linear.com/product/LTM8047
[2] http://www.linear.com/product/LTM8048
[3] http://www.linear.com