NEW PRODUCT QUICK GUIDE

R05C1TF05S

The RxxC1TFxxS series is the latest breakthrough in isolated DC/DC converters. With an ultra-compact 5 x 4mm SMD package and a low profile of just 1.18mm, it sets a new standard for size and performance in its class. Offering 3kVAC/1s isolation and selectable 3.3V or 5V outputs, it's perfect for
applications like COM port isolation, industrial automation, IoT, and sensor isolation. With a wide input range of 3V to 5.5V and an ambient temperature range up to 125°C with derating, it ensures reliability in diverse environments. Simplifying design with its integrated solution, the RxxC1TFxxS series is your compact, reliable choice for demanding electronic systems.

Unique selling proposition:	Ultra-compact 5x4mm SMD package // low profile (1.18mm) // 3kVAC/1s isolation // 3 – 5.5V wide input range // 3.3 or 5V selectable output
Target customer:	IoT applications // industrial automation // e-mobility // consumer electronics // telecom // test and measurement
Target applications examples:	COM port isolation // space-constrained applications // sensor isolation
Main features:	1W isolated DC/DC converter // up to 125°C operating temperature with derating // integrated solution // UVLO // SCP // OLP // regulated output // on/off control //
Global sales release date:	9 April 2024
Web release date:	28 February 2024
Available from sample stock:	none

RPL-1.0

The RPL-1.0 is a synchronous buck converter with an integrated inductor in a tiny 3mm x 3mm x 2mm thermally enhanced LGA package. The input range is from 3.0 to 22VDC, allowing 3.3V, 5V, and 12V supply rails to be used. The output voltage can be set with two resistors in the range of 0.6V up to
12V. The output current is up to 1A and is fully protected against continuous short-circuits, output overcurrent, or over-temperature faults. Its high current and small size make the RPL-1.0 ideal for imaging systems, distributed power architectures, and portable battery-powered equipment in telecom as well as industrial applications.

Unique selling proposition:	Wide input (3 – 22V) // low profile 2mm // adjustable 0.6 to 12V output
Target customer:	IoT applications // industrial automation // e-mobility // consumer electronics // telecom // test and measurement
Target applications examples:	12V bus-powered applications // space-constrained applications // imaging systems // portable battery-powered equipment
Main features:	1A max output current // 22VDC max input voltage // buck switching regulator // SCP // OCP // OVP // UVLO
Global sales release date:	9 April 2024
Web release date:	28 February 2024
Available from sample stock:	none

RPH-3.0

The RPH-3.0 series, a cutting-edge Non-Isolated Step-Down Power Module, is a compact and versatile solution designed to meet challenging power conversion needs with efficiency and precision. This buck regulator power module is equipped with an integrated shielded inductor, offering a host of features to ensure optimal performance and reliability. With a maximum input voltage of 55V, this module provides a robust solution for various applications, ensuring stable and efficient voltage regulation. The output voltage is fully programmable within the range of 1 to 15V, providing flexibility to meet specific system requirements. Delivering up to 3A maximum output current, this power module is well-suited for powering a range of electronic devices and systems. Safety is a top priority, and this module comes equipped with Short Circuit Protection (SCP), Overcurrent Protection (OCP), Overvoltage Protection (OVP), and Undervoltage Lockout (UVLO) features, ensuring the longevity and protection of connected devices. The compact 10mm x 12mm x 4mm LGA package makes this power module ideal for applications with space constraints, allowing for easy integration. The use of Flip-Chip technology enhances thermal management, ensuring that the module operates efficiently even in demanding conditions. With an impressive efficiency rating of up to 91%, this Non-Isolated Step-Down Power Module not only meets but exceeds industry standards. This high efficiency not only contributes to reduced energy consumption but also minimizes heat generation, enhancing the overall reliability and lifespan of the module. The RPH-3.0 series is a state-of-the-art solution that combines cutting-edge technology with compact design and robust protection features for all consumer electronics, industrial applications, or any other project requiring a reliable point of load supply that delivers consistent and efficient performance.

Unique selling proposition:	55V max input voltage // 1 – 15V programmable output voltage // 10 x 12 x 4mm compact LGA package // full solution with integrated inductor
Target customer:	IoT applications // industrial automation // e-mobility // consumer electronics // telecom // test and measurement
Target applications examples:	48V battery powered applications // space-constrained applications // applications where time-to-market is critical
Main features:	3A max output current // buck switching regulator // 91% efficiency // SCP // OCP // OVP // UVLO
Global sales release date:	9 April 2024
Web release date:	28 February 2024
Available from sample stock:	none

RPL-10

The RPL-10 is a 10A buck converter with an integrated inductor in a compact 7mm x 7mm x 4.4mm thermally enhanced LGA package. The input range is from 4.0 to 16VDC, allowing both 5V and 12V supply rails to be used. The output voltage can be set with two resistors in the range from 0.6V up to 5.5V. The output is fully protected against continuous short-circuit, overload, under-voltage, or over-temperature faults. A PG output and EN input allow easy power sequencing. Its high output current capability, small size, light load pulse skipping, and fast transient regulation make the RPL-10 ideal for FPGAs, imaging systems, distributed power architectures, and portable equipment in telecom as well as industrial applications.

Unique selling proposition:	Ultra-compact 7x7mm footprint // 0.6 – 5. 5V programmable output // full solution with integrated inductor
Target customer:	IoT applications // industrial automation // e-mobility // consumer electronics // telecom // test and measurement
Target applications examples:	FPGAs // imaging systems // portable equipment // 12V bus-powered applications // space-constrained applications // applications where time-to-market is critical
Main features:	10A max output current // 16VDC max input voltage // 94% efficiency // buck switching regulator // SCP // OCP // OVP // UVLO

Global sales release date:	9 April 2024
Web release date:	28 February 2024
Available from sample stock:	none

RPL-20

The RPL-20 is a 20A buck converter with an integrated inductor in a compact 7mm x 7mm x 4.4mm thermally enhanced LGA package. The input range is from 4.0 to 16VDC, allowing both 5V and 12V supply rails to be used. The output voltage can be set with two resistors in the range from 0.6V up to 5.5V. The output is fully protected against continuous short-circuit, overload, under-voltage or over-temperature faults. A PG output and EN input allow easy power sequencing. Its high output current capability, small size, light load pulse skipping, and fast transient regulation make the RPL-20 ideal for FPGAs, imaging systems, distributed power architectures, and portable equipment in telecom as well as industrial applications.

Unique selling proposition:	Ultra-compact 7x7mm footprint // 0.6 – 5. 5V programmable output // full solution with integrated inductor
Target customer:	IoT applications // industrial automation // e-mobility // consumer electronics // telecom // test and measurement
Target applications examples:	FPGAs // imaging systems // portable equipment // 12V bus-powered applications // space-constrained applications // applications where time-to-market is critical
Main features:	20A max output current // 16VDC max input voltage // 94% efficiency // buck switching regulator // SCP // OCP // OVP // UVLO
Global sales release date:	9 April 2024
Web release date:	28 February 2024
Available from sample stock:	none