

Expert kit

KIT_2K5W_CCM_TOLL

To be used with

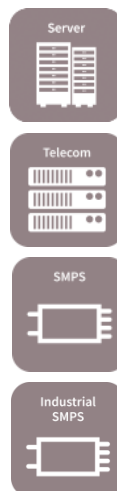
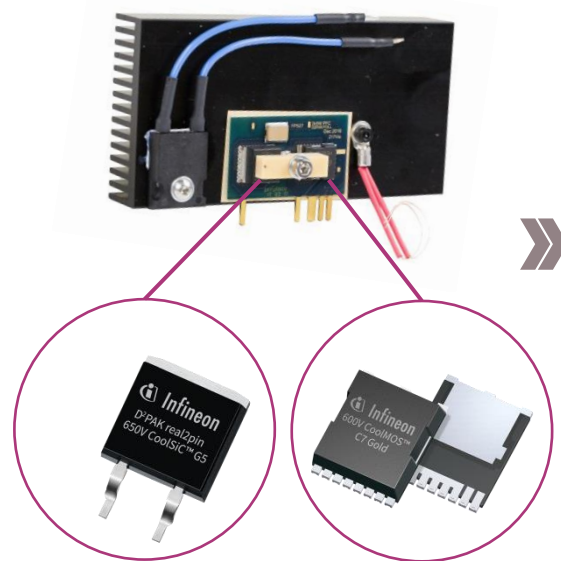
[EVAL_2K5W_CCM_4P_V2](#)

[Zechner Florian \(IFAT PMM ACDC AE\)](#)



Expert kit

KIT_2K5W_CCM_TOLL



Technical & order details

To be used together with:
[EVAL_2K5W_CCM_4P_V2](#)

Parameter	Value
Input voltage	85 V _{AC} ~ 265 V _{AC}
Input current	<14 A _{eff}
Output Voltage & current	400 V _{DC} , 6.25 A
Output power	2.5k W@V _{in} =230 V;
Peak efficiency	>98% @ 230 V _{AC}

Learn more

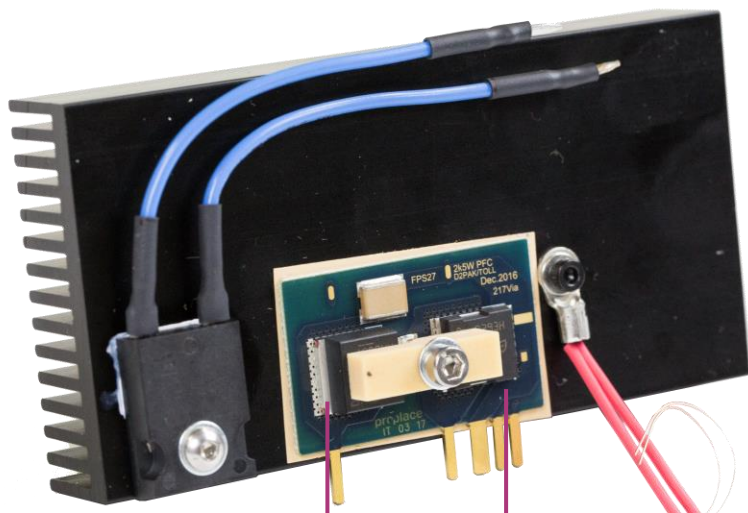
Sales name	KIT_2K5W_CCM_TOLL
SAP Mat number	SP001690906
Infineon order code	KIT2K5WCCMTOLLTOB01

Features

- > Convenient SMD upgrade kit for the [EVAL_2K5W_CCM_4P_V2](#) PFC evaluation board
- > Modifies the PFC stage to SMD solution by just replacing the heatsink with it's already assembled devices
- > Topology: CCM PFC
- > Assembled on heat sink for plug and play

Benefits

- > Easy to use SMD solution
- > Thermal management example
- > SMD vs. THD comparison in same environment
- > Plug and play module for CCM PFC



600 V CoolMOS™ G7
([IPT60R028G7](#))

CoolSiC™ Schottky diode 650 V G5
([IDK12G65C5](#))

Ordering code:
KIT_2K5W_CCM_TOLL

**Expert kit with 600 V CoolMOS™ G7 for
EVAL_2.5KW_CCM_4PIN**

Board components

- › 600 V CoolMOS™ G7 SJ MOSFET
([IPT60R028G7](#))
- › CoolSiC™ Schottky diode 650 V G5
([IDK12G65C5](#))

To be used with the following board

- › [EVAL_2K5W_CCM_4P_V2](#)

Target applications

- › Telecom
- › Server
- › Industrial
- › General SMPS

Component features

IPT60R028G7

CoolMOS™ C7 Gold SJ MOSFET in TO-Leadless (G7) - a new SMD package using Kelvin source concept

The 600 V CoolMOS™ C7 Gold (G7) SJ MOSFET technology for the first time brings together the benefits of the improved 600 V CoolMOS™ G7 technology, 4pin Kelvin source capability and the improved thermal properties of the TO-Leadless package. This enables now SMD solution for high current hard switching topologies such as power factor correction (PFC) up to 3 kW.

The 600 V CoolMOS™ G7 further more offers new SMD design solutions also for resonant circuits such as high end LLC topologies.

IDK12G65C5

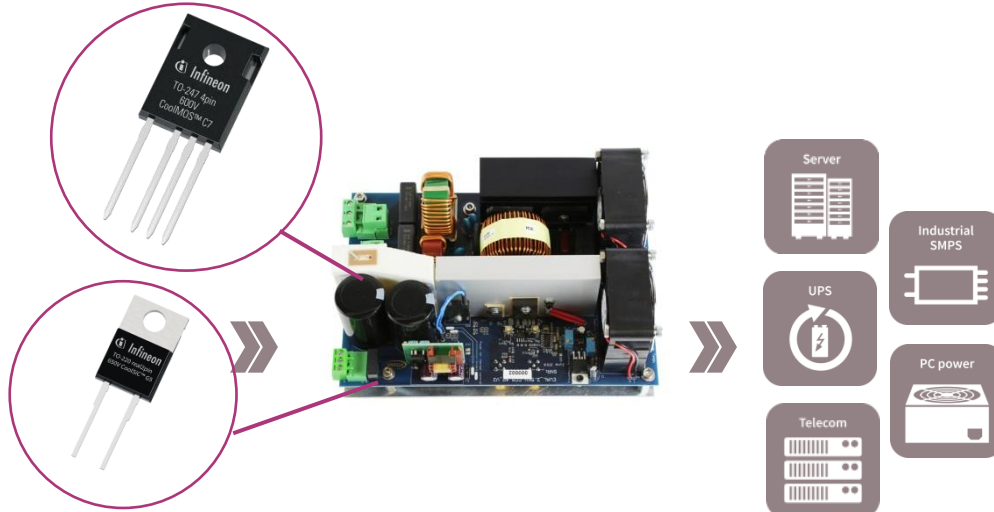
CoolSiC™ Schottky diode 650 V G5

CoolSiC™ generation 5 represents Infineon's leading edge technology for SiC Schottky barrier diodes. The Infineon proprietary diffusion soldering process, already introduced with G3, is now combined with a new, more compact design and thin wafer technology. The result is a new family of products showing improved efficiency over all load conditions, coming from both the improved thermal characteristics and a lower figure of merit ($Q_c \times V_f$). Benchmark switching behaviour.

- > No reverse recovery charge
- > Smooth recovery curve
- > Temperature independent switching behaviour
- > High operating temperature ($T_j \text{ max} = 175^\circ\text{C}$)

To be used with evaluation board EVAL_2K5W_CCM_4P_V2

EVAL_2K5W_CCM_4P_V2



Technical & order details

Parameter	Value
Input voltage	85 V _{AC} ~ 265V _{AC}
Output voltage	400 V
Output power	2.5k W @ V _{in} = 230 V _{AC} 1kW @ V _{in} = 90 V _{AC}
Peak Efficiency	>98%

Learn more

Sales name	EVAL_2K5W_CCM_4P_V2
SAP Mat number	SP001712686
Infineon Order Code	EVAL2K5WCCM4PV2TOBO1

Features

- > The board is developed for the laboratory use
- > This evaluation board help's customers to get familiar with Infineon products and to evaluate different behaviour of conventional 3pin devices compared to the high performance CoolMOS™ C7 devices in TO-247 4pin within a PFC application
- > The version V2 also enables the evaluation of the SMD TOLL adaptor kit [KIT_2K5W_CCM_TOLL](#)
- > Variable switching frequency: 40-200 kHz

Benefits

- > Able to analyse the switching performance of different package variants in a very common used PFC topology. It helps to understand the switching behaviour and parasitic influences
- > With the various option settings via "solder jumper" it is possible to modify the circuit without changing any layout
- > Therefore the evaluation board offers plenty investigation variants
- > It shows how to boost the efficiency in a standard PFC topology

Following expert kits are available

- > [KIT_2K5W_CCM_TOLL](#) Easy to use SMD solution
- > [KIT_6W_12V_BIAS_ICE3](#) DC-DC Bias board
- > [KIT_6W_12V_BIAS_ICE5](#) DC-DC Bias board



Technical Material

- > Application Notes
- > Simulation Models
- > Datasheets
- > PCB Design Data

- > [KIT_2K5W_CCM_TOLL - Infineon Technologies](#)
- > [EVAL_2K5W_CCM_4P_V2 - Infineon Technologies](#)

Evaluation Boards

- > Evaluation Boards
- > Demoboards
- > Reference Designs

- > www.infineon.com/evaluationboards

Videos

- > Technical Videos
- > Product Information Videos

- > www.infineon.com/mediacenter

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Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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