

Würth Elektronik eiSos GmbH & Co. KG

EMC & Inductive Solutions

Max-Eyth-Straße 1 · 74638 Waldenburg · Germany

Tel. +49 (0) 79 42 945-0 · Fax +49 (0) 79 42 945-400

eiSos@we-online.de · www.we-online.de



Product/Process Change Notice (PCN)

- Major change
 Minor change

PCN #: PCN_VDRM_20180201

Product Affected: 171012402

PCN Date: December 18th, 2017Effective Date: February 2nd, 2018

Contact: Product Management

Phone: +49 (0) 7942 - 945 5001

Fax: +49 (0) 7942 - 945 5179

E-mail: pcn.eisos@we-online.de /

- Product Mark
 Date Code
 Packaging
 Others

Attachment: Yes No

Samples:

DESCRIPTION AND PURPOSE OF CHANGE:

In the continuous process of offering more value to our customers, Würth Elektronik has extended the nominal current capability of the 171012402 (TO263 1.5A 5-24Vout) to 2.0A output current.

In addition the technical content of the MagI³C power module datasheet has significantly been enlarged.

There will be no change in form, fit, quality or reliability of the product.

DETAIL OF CHANGE:

Extended nominal output current from 1.5A to 2.0A. Due to the ramp up phase of the product the nominal output current was set to a conservative level of 1.5A. Based on the available process and testing data the output current has been enlarged to 2.0A.

No changes to the component have been applied. No changes to existing designs using the module are therefore required.

Additional information has been included in the datasheet:

- Bookmarks have been activated for quick chapter navigation
- Package bottom view has been added
- Marking description has been added
- Ordering information of related family members has been added
- Electrical specifications table has been structured in sections in order to improve readability
- All electrical performance curves have been measured with higher resolution and presented with improved readability
- Line and load regulation diagrams have been added
- Links for equations, chapters, parameters, etc. have been implemented for easy navigation within the document
- Added diagram of switching frequency versus R_{ON}
- Added diagram of efficiency versus switching frequency
- Output capacitor selection approach is explained and mathematically calculated based on

Würth Elektronik eiSos GmbH & Co. KG Sitz Waldenburg, Registergericht Stuttgart HRA 580801

Komplementär Würth Elektronik eiSos Verwaltungs-GmbH, Sitz Waldenburg, Registergericht Stuttgart HRB 581033 · Geschäftsführer Oliver Konz, Thomas Schrott, Alexander Gerfer

Bankverbindungen UniCredit Bank AG Stuttgart, Konto 322 620 136, BLZ 600 202 90, IBAN DE86 6002 0290 0322 6201 36, SWIFT/BIC HYVEDEMM473

USt.-IdNr. DE220618976

Würth Elektronik eiSos GmbH & Co. KG

EMC & Inductive Solutions

Max-Eyth-Straße 1 · 74638 Waldenburg · Germany

Tel. +49 (0) 79 42 945-0 · Fax +49 (0) 79 42 945-400

eiSos@we-online.de · www.we-online.de



ripple and transient requirements

- Load transition waveforms are displayed. A practical example is calculated and measured waveforms are presented.
- Effect of soft-start is shown
- Light load operation description has been added with inductor current diagrams showing the effect on the output voltage ripple
- Overvoltage protection, overcurrent protection, short circuit protection and startup into pre-biased load are described in detail and graphs have been added
- Layout section has been upgraded with more details, close up PCB pictures and additional recommendations
- EVAL board description has been extended with an explanation of the circuit and operational instructions
- EMI Filter design section has been added

RELIABILITY / QUALIFICATION SUMMARY:

Product specification approval, according to internal requirements, has been released by the Quality Department and the Product Management Department.

DATA SHEET CHANGE:

Yes

No