

IXYS ICD Product Change Notification (PCN)

PCN1073 CPC1394G Improvements and Data Sheet Changes December 13, 2019

Detailed Description of Changes

1. IXYS Integrated Circuits Division (ICD), now part of Littelfuse, has made design enhancements to the CPC1394G to improve package integrity when subjected to the more demanding mechanical stresses caused by some solder reflow processes.

To facilitate increased device robustness, the package mold compound has been upgraded and design improvements have been made to the leadframe. This will enable the CPC1394G to withstand the diverse solder reflow profiles in production today.
2. During the engineering requalification procedure an additional LED was evaluated to ensure security of supply of this high volume product. Because this supplementary LED has a slightly greater forward voltage rating, the maximum “LED Forward Voltage” specification in the CPC1394 data sheet will change from: 1.4V to 1.5V with $I_F=5\text{mA}$.
3. As part of the requalification process, a review of the data sheet revealed an anomaly in the load current specification. The CPC1394G, originally designed for the pulsed output function provided by smart meters such as those deployed in Europe, had a pulsed load current specification typically not provided in solid state relay data sheets. This 120mA rating was unintentionally listed as the steady state load current rather than a pulsed load current specification. The CPC1394G maximum steady state load current specification of 90mA has been added to the data sheet along with an On-resistance specification at 90mA. Please review the updated data sheet for device pulse current capabilities and steady state performance. These load-current and on-resistance specification changes are not a result of any modifications to the device. Products designed and built based on the previous data sheet specifications are not expected to perform less effectively with the improved leadframe and mold compound.

These changes are effective March 1, 2020 and will be documented concurrently with the release of PCN1073 in the updated CPC1394 data sheet, available online at www.ixysic.com.

The PCN number assigned to this action is **PCN1073** and should be referenced in any correspondence related to the change.

Reason for Change

Leadframe and mold compound package design improvements will result in enhanced solder reflow performance and product reliability. This change is a result of our ongoing effort and commitment to continuous quality improvement of our products.

Change to the data sheet maximum LED Input Voltage Drop is to safeguard security of supply of this high volume product.

Load current and On-resistance data sheet specification changes are to clarify device capability and performance.



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Products Affected

CPC1394G
CPC1394GV
CPC1394GR
CPC1394GRTR

Anticipated Impact on Quality and Reliability

The change will improve product quality and reliability.

Contact Information

For any questions related to the PCN notice, please contact IXYS Integrated Circuits Division's Quality Department as indicated below:

Quality Department
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IXYS is now part of Littelfuse