



COMPLEX • DLI • JOHANSON MFG  
NOVACAP • SYFER • VOLTRONICS

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Notice of intention to phase out use of ‘Novacap’ brand RN & RB part numbers

Knowles Precision Devices (KPD) currently market MLCC’s under the historic brands of Novacap and Syfer. Within the Novacap brand, different dielectric codes are used to define the RoHS and REACH status of the components, as below:

Dielectric Code	Meaning
N	C0G / NP0 (1B), may contain lead within the ceramic dielectric body of the capacitor
RN	C0G / NP0 (1B), lead free construction
B	X7R (2R1), may contain lead within the ceramic dielectric body of the capacitor
RB	X7R (2R1), lead free construction

For reference:

- RoHS:** Lead is currently allowed by exemption in the ceramic dielectric of MLCC’s with a voltage rating  $\geq 250V_{dc}$  or  $\geq 125V_{ac}$  (Exemption 7c-II).  
Voltage ratings below these have no exemption and are not RoHS compliant if containing lead
- REACH** Lead is defined as a Substance of Very High Concern and must be declared to the user if it is within an article (component) in a level  $\geq 0.1\%$ . Most MLCC’s using lead in the dielectric body will be over this threshold and are therefore defined as non-REACH compliant.  
Note that use of an article containing an SVHC automatically cascades the REACH status onto equipment or items made with that article.

‘Syfer’ brand parts have been available ‘lead free’ since 2006 for most ranges.

KPD aligned the specifications of ‘Syfer’ brand and ‘Novacap’ brand RN & RB code parts in early 2018. It is now our intention to phase out use of the ‘Novacap’ brand RN & RB codes and direct customers to use the ‘Syfer’ brand part numbers for any new project.

We will continue to support customers with existing ‘RN’ and ‘RB’ part numbers designed in, and datasheets and compliance certificates for these will eventually be made available through the KPD website [www.knowlesc capacitors.com](http://www.knowlesc capacitors.com) using the ‘MLC Part Search’ function. For now, the customer will have to contact their local Customer Service office for these, although this will offer the opportunity to engage with the customer and suggest a change to a Syfer brand part number.

Customers for any new projects should be directed to use the equivalent ‘Syfer’ brand part number. ‘RN’ and ‘RB’ part numbers are no longer supported through the ‘MLC Part Builder’ function on the website.

In conjunction with this, our website now includes the ability to generate part numbers, datasheets and environmental certificates for the legacy ‘N’ and ‘B’ ‘Novacap’ brand part numbers. Customers doing this now see a message *“This part may contain lead. For guaranteed lead-free parts, choose Syfer brand”*.

If you have any questions relating to this, please contact Nan Zhang [nan.zhang@knowles.com](mailto:nan.zhang@knowles.com) for clarification.