



Electronic Parts and Components

RoHS

Frequently Asked Questions

Please note: All herein contained statements only refer to electronic components manufactured by EPCOS.



1. Are components subject to the RoHS regulation?

The law applies to:

1. Large household appliances
 2. Small household appliances
 3. IT- and Telecommunication equipment
 4. Consumer equipment
 5. Lighting equipment
 6. Electrical and electronic tools (with the exception of large-scale stationary industrial tools)
 7. Toys, leisure and sports equipment
 10. Automatic dispensers
- as well as lamps and light bulbs for households.

Thus, the directive 2002/95/EU does not apply directly to passive components, however, EPCOS offers products that are made for use in equipment mentioned in the directive.

2. Which EPCOS components have lead-free (RoHS compatible) terminations?

Please see the RoHS – Roadmap.

3. When will EPCOS offer lead-free (RoHS compatible) components?

The conversion to lead-free components started in 2001. Newly developed products already have lead-free terminations (see Roadmap for RoHS compatible products).

4. Are RoHS compatible, approved samples available?

Samples are available (see Roadmap for RoHS compatible products).

5. Does EPCOS mark RoHS compatible components specially?

No, we do not. One can distinguish the products via date code.

6. Does EPCOS change the ordering codes in the course of the transition to RoHS compatible?

No, generally not.

7. Which of your RoHS compatible components can still contain lead?

Our Ceramic Components and Ferrites.

8. Do the electric specifications of your RoHS compatible components change?

No, they do not.



9. For which of your components can the ban of lead not be applied?

All of our components can be converted to having lead-free terminations.

10. Of which material do the terminations consist?

The lead-free terminations generally consist of Sn100 (pure tin) with a diffusion preventive made of nickel.

11. Do your RoHS compatible components require higher soldering temperatures?

A process related temperature adjustment of lead-containing processes could be possible. Lead-free processes generally require a new temperature profile due to the soldering material used.

12. Are there differences in processing tin/lead- and lead-free soldering alloys?

Due to the higher melting temperature of lead-free soldering material soldering profiles have to be adjusted accordingly. You may find information on that subject e.g. in the IEC Standard 60068-2-58.

13. Do you have technical reports on the subject „Lead-free soldering“?

For further information:

<http://www.epcos.de/web/generator/Web/Sections/CompanyProfile/Environment/RoHS/Page.templateId=render,locale=nn.html>

14. For which EPCOS components is the maximum soldering temperature below 260°C? What is the maximum temperature for these components?

Please see the RoHS – Roadmap.

15. Are there EPCOS components that still contain mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated diphenylethers (PBDE)?

The elements mercury, cadmium and its combinations, as well as hexavalent chromium may be contained in traces below the threshold defined by law.
PBB as well as PBDE, in particular special Octa- and pentabrominated diphenylethers, have been eliminated from production during the last years.

16. Are there limitations regarding shelf live of products?

As of today we are not aware of any differences regarding shelf live or solderability (moist termination) between lead-free and lead-containing terminations. Generally shelf live greatly depends on the store conditions and environmental influences (temperature, humidity).



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17. Who is the contact person for RoHS and current European legislation regarding product related environmental protection?

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