

General Statement of Lead Free/RoHS Compliance Migration Procedure

Z-Communications, Inc. (Z-COMM) is committed to the promotion of a clean environment for current and future generations. Further, in response to environmental guidelines set forth by the European Union (EU), Z-COMM has adopted an environmental policy in accordance with the RoHS (Restriction of Hazardous Substances) Directive, which prohibits the inclusion of the following substances in electronic devices:

Lead (Pb) < 0.1% Mercury (Hg) < 0.1% Cadmium (Cd) < 0.01% Hexavalent Chromium (CrVI) < 0.1% Polybrominated Biphenyls (PBB) < 0.1% Polybrominated Diphenyl Esters (PBDE) < 0.1%

Z-COMM is currently accepting orders for compliant product with a 6-8 week lead-time. Please contact an applications engineer at applications@zcomm.com to find out if your part number has been converted. Also, see <u>Z-COMM's Lead-Free/RoHS Ordering Process</u> for more details.

Z-COMM's Migration Procedure:

Identification:

Z-COMM first identified where the banned substances occurred in our products. Pb is contained in component leads and solder. Hg & Cd are not contained. CrVI, PPB, and PBDE are possibly contained in certain configurations of PCB materials.

Pb-Free/RoHS Compliant Material Replacement:

- 1. Components: Suitable Pb-Free components are identified and procured. A suitable component is one that is deemed Pb-Free by the supplier and can withstand the higher reflow temperatures typical of a lead free process, see AN-112-B. Pb-Free components are then segregated into a separate Pb-Free stocking system.
- 2. Solder: A suitable solder not only has to meet the criteria of components but must also provide a solderability; i.e.: fillets, flow, joint reliability; equal to or better than current leaded solder, and compatible with current leaded solder processes.
- 3. PCB Materials: Suitable PCB materials will not have any of the banned substances and will not compromise the current solderability of the product.
- Note: Pb-Free products will be back compatible to current leaded manufacturing process

Qualification:

Z-COMM's qualification will consist of the following:

- 1) Information provided by the supplier/vendor of the compliant material.
- 2) Z-COMM collected data.
- 3) Statistical analysis of the data.
- 4) Repeatability of process.
- 5) Verification by comparison with leaded version of product.

Timeline, Process, and Special Requests:

Z-COMM's ability to complete the Pb-Free/RoHS compliance migration largely depends upon the availability of suitable components/materials in the market place. Z-COMM understands that certain vendors may not yet have Pb-Free process in place or parts available. Therefore we will work with our vendors to the best of our abilities to meet our goal.

Product Identification:

Pb-Free, RoHS compliant product will be indicated by the addition of "-LF" as a suffix to the normal part number. I.e.: V585ME06 as a lead free version will have the part number: V585ME06-LF. The symbol of Pb will be added to the tape and reel to indicate compliant product.

Please feel free to contact your local Z-COMM representative or Z-COMM applications engineering if you have any questions or concerns about our Pb-Free, RoHS compliance procedure.

Regards,

Z-COMM Product Management