# Material Composition Declaration

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This document is a declaration of the substances within the manufacturer listed item. Note: if the item is an assembly with lower level parts, the declaration encompasses all lower level materials for which the manufacturer has engineering responsibility.

**Adobe Reader version 7.0.5 is required to complete this declaration.**

| 1752-2 1.1 | IPC Web Site for Information on IPC-1752 Standard http://www.ipc.org/IPC-175x | **Form Type *** Distribute | **Declaration Class *** Class 6 - RoHS Yes/No, Homogeneous Materials and Mfg Informat |
|---|---|---|---|

## Supplier Information

| **Company Name *** | Company Unique ID | Unique ID Authority | **Response Date *** | Response Document ID | |
|---|---|---|---|---|---|
| **Venkel Ltd.** | | | **2019-04-26** | | |
| **Contact Name** * | Title - Contact | **Phone - Contact *** | **Email - Contact *** | Duplicate Contact -> Authorized Representative | |
| **Nelson Johnson** | | **512-794-0081** | **nelson@venkel.com** | | |
| **Authorized Representative *** | Title - Representative | **Phone - Representative *** | **Email - Representative** * | Supplier Comments or URL for Additional Information | |
| **Nelson Johnson** | | **512-794-0081** | **nelson@venkel.com** | | |

| Requester Item Number | Mfr Item Number | Mfr Item Name | Effective Date | Version | Manufacturing Site | **Weight *** | UOM | Unit Type |
|---|---|---|---|---|---|---|---|---|
| TAXXXTCRXXXXDR | TAXXXTCRXXXXDR | Low ESR Tantalum Capacitors | | | | 446.8 | mg | Each |
| Alternate Recommendation | | | | Alternate Item Comments | | | | |

## Manufacturing Process Information

| Terminal Plating / Grid Array Material | Terminal Base Alloy | J-STD-020 MSL Rating | Peak Process Body Temperature | Max Time at Peak Temperature | Number of Reflow Cycles |
|---|---|---|---|---|---|
| **Matte Tin (Sn) - with Nickel (Ni) barrier** | **Not Applicable** | **1** | **260** C | **10** seconds | **2** |

Comments

*** Required Field**

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Save the fields in this form to a file | Export Data | Import fields from a file into this form | Import Data | Clear all of the fields on this form | Reset Form | Lock the fields on this form to prevent changes | Lock Supplier Fields

## RoHS Material Composition Declaration

**Declaration Type *** **Custom**

| **RoHS Directive 2002/95/EC** | **RoHS Definition:** Quantity limit of 0.1% by mass (1000 PPM) in homogeneous material for: Lead (Pb), Mercury, Hexavalent Chromium, Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE) and quantity limit of 0.01% by mass (100 PPM) of homogeneous material for Cadmium |
|---|---|

Venkel Ltd. hereby declares and certifies that all resistive components manufactured are RoHS 5/6 compliant with RoHS Recast (RoHS2) according to the definitions and restrictions given by the Directive 2011/65/EU of The European Parliament and of the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE).Our components do not contain any of the substances listed in Annex II for the exception of lead which is allowed by exemption 7 (c)-I which states: Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound

| **RoHS Declaration *** | 1 - Item(s) does not contain RoHS restricted substances per the definition above | **Supplier Acceptance *** | **Accepted** |
|---|---|---|---|

**Exemptions:** If the declared item does not contain RoHS restricted substances per the definition above except for defined RoHS exemptions, then select the corresponding response in the RoHS Declaration above and choose all applicable exemptions.

## Declaration Signature

**Instructions:** Complete all of the required fields on all pages of this form. Select the "Accepted" on the Supplier Acceptance drop-down. This will display the signature area. Digitally sign the declaration (if required by the Requester) and click on Submit Form to have the form returned to the Requester.

| Supplier Digital Signature | Nelson Johnson | Digitally signed by Nelson Johnson<br>Date: 2019.04.26 10:31:31 -05'00' | |
|---|---|---|---|

*** Required Field**

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## Homogeneous Material Composition Declaration for Electronic Products

**SubItem Instructions:** The presence of any JIG Level A or B substances must be declared. [1] indicate the subpart in which the substance is located, [2] provide a description of the homogeneous material [3], enter the weight of the homogeneous material.

**Substance Instructions:** [A] select the Level (JIG A, JIG B, Requester or Supplier) [B] select the substance category (JIG or Requester) or enter a value (Supplier). [C] select the substance (JIG) or enter the substance and CAS (Other). [D] select a RoHS exemption, if applicable [E] enter the weight of the substance or the PPM concentration [F] Optionally enter the positive (+) and negative (-) tolerance in percent (Note: percent tolerance values are expected to cover a 3 sigma range of distribution unless otherwise noted).

**Line Functions:** +I Inserts a New Item /SubItem +M Inserts a new Material +C Inserts a new Substance Category +S Inserts a new Substance - Deletes the element line

| | | Item/SubItem Name | | | Homogeneous Material | Weight | Unit of Measure | | | Level | Substance Category | | | Substance | CAS | Exempt | Weight | Unit of Measure | Tolerance | | PPM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | - | + | |
| +I | -I | TAXXXTCRXXXXDF | +M | -M | Tantalum Anode | 186.6284 | mg | +C | -C | Supplier | Tantalum | +S | -S | Tantalum | 7440-22-4 | | 68.3604 | mg | | | |
| | | | | | | | | +C | -C | Supplier | Manganese | +S | -S | Manganese | 7439-96-5 | | 37.4418 | mg | | | |
| | | | | | | | | +C | -C | Supplier | Silver | +S | -S | Silver | 7440-22-4 | | 48.031 | mg | | | |
| | | | | | | | | +C | -C | Supplier | Oxygen | +S | -S | Oxygen | 7782-44-7 | | 22.0719 | mg | | | |
| | | | | | | | | +C | -C | Supplier | Carbon | +S | -S | Carbon | 7440-44-0 | | 9.6956 | mg | | | |
| | | | | | | | | +C | -C | Supplier | Flourine | +S | -S | Flourine | 7782-41-4 | | 0.8042 | mg | | | |
| | | | | | | | | +C | -C | Supplier | Misc. | +S | -S | Misc. | proprietary | | 0.2234 | mg | | | |
| | | | +M | -M | Leadframe | 103.7023 | mg | +C | -C | Supplier | Copper | +S | -S | Copper | 7440-50-8 | | 59.8712 | mg | | | |
| | | | | | | | | +C | -C | B | Nickel (external applic | +S | -S | Nickel | 7440-02-0 | | 17.7826 | mg | | | |
| | | | | | | | | +C | -C | Supplier | Zinc | +S | -S | Zinc | 7440-66-6 | | 15.9061 | mg | | | |
| | | | | | | | | +C | -C | Supplier | Tin | +S | -S | Tin | 7440-31-5 | | 9.3381 | mg | | | |
| | | | | | | | | +C | -C | Supplier | Iron | +S | -S | Iron | 7439-89-6 | | 0.2234 | mg | | | |
| | | | | | | | | +C | -C | Supplier | Misc. | +S | -S | Misc. | proprietary | | 0.5808 | mg | | | |
| | | | +M | -M | Molding case | 156.4694 | mg | +C | -C | Supplier | Oxygen | +S | -S | Oxygen | 7782-44-7 | | 66.9753 | mg | | | |
| | | | | | | | | +C | -C | Supplier | Silicon | +S | -S | Silicon | 7440-21-3 | | 51.8288 | mg | | | |
| | | | | | | | | +C | -C | Supplier | Carbon | +S | -S | Carbon | 7440-44-0 | | 31.276 | mg | | | |
| | | | | | | | | +C | -C | Supplier | Iron | +S | -S | Iron | 7439-89-6 | | 1.2064 | mg | | | |
| | | | | | | | | +C | -C | Supplier | Misc. | +S | -S | Misc. | proprietary | | 5.1829 | mg | | | |

*** Required Field**

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