



# 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.**

IPC-1752-2 v1.02  
1752-2

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

<b>Company Name *</b> AVX CORPORATION	Company Unique ID 05-889-5921	Unique ID Authority Dun & Bradstreet	<b>Response Date *</b> 2008-04-05	Response Document ID				
<b>Contact Name *</b> Dennis Oldland	Title - Contact corporate env. mgr	<b>Phone - Contact *</b> 18439460241	<b>Email - Contact *</b> doldland@avxus.com	Duplicate Contact -> Authorized Representative				
<b>Authorized Representative *</b> Dennis Oldland	Title - Representative corporate env. mgr	<b>Phone - Representative *</b> 18439460241	<b>Email - Representative *</b> doldland@avxus.com	Supplier Comments or URL for Additional Information				
Requester Item Number	Mfr Item Number	Mfr Item Name	Effective Date	Version	Manufacturing Site	Weight	UOM	Unit Type
			2008-04-05		Lanskroun, CZ	531.4	mg	Each
Alternate Recommendation	TAJE or TPSE with copper term		2003-01-01	Alternate Item Comments	Family data sheets encompass request			

## Manufacturing Process Information

Terminal Plating / Grid Array Material <b>Matte Tin (Sn) - with Nickel (Ni) barrier</b>	Terminal Base Alloy <b>Not Applicable</b>	J-STD-020 MSL Rating <b>1</b>	Peak Process Body Temperature <b>260 C</b>	Max Time at Peak Temperature <b>10 seconds</b>	Number of Reflow Cycles <b>3</b>
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Comments

Save the fields in this form to a file

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Clear all of the fields on this form

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Lock the fields on this form to prevent changes

Lock Supplier Fields

### RoHS Material Composition Declaration

Declaration Type \*

Detailed

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

Please indicate whether any homogeneous material (as defined by the RoHS Directive, EU 2002/95/EC and implemented by the laws of the European Union member states) of the part identified on this form contains lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls and/or polybrominated diphenyl ethers (each a "RoHS restricted substance") in excess of the applicable quantity limit identified above. If a homogeneous material within the part contains a RoHS restricted substance in excess of an applicable quantity limit, please indicate below which, if any, RoHS exemption you believe may apply. If the part is an assembly with lower level components, the declaration shall encompass all such components.

Supplier certifies that it gathered the information it provides in this form using appropriate methods to ensure its accuracy and that such information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form.

Supplier acknowledges that Company will rely on this certification in determining the compliance of its products with European Union member state laws that implement the RoHS Directive. Company acknowledges that Supplier may have relied on information provided by others in completing this form, and that Supplier may not have independently verified such information. However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part, and those certifications are at least as comprehensive as the certification in this paragraph.

If the Company and the Supplier enter into a written agreement with respect to the identified part, the terms and conditions of that agreement, including any warranty rights and/or remedies provided as part of that agreement, will be the sole and exclusive source of the Supplier's liability and the Company's remedies for issues that arise regarding information the Supplier provides in this form. In the absence of such written agreement, the warranty rights and/or remedies of Supplier's Standard Terms and Conditions of Sale applicable to such part shall apply.

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 checkboxes will appear below. Check all applicable exemptions.

- 1. Mercury in compact fluorescent lamps not exceeding 5 mg per lamp.
- 2a. Mercury in straight fluorescent lamps for general purposes not exceeding 10 mg in halophosphate lamps
- 2b. Mercury in straight fluorescent lamps for general purposes not exceeding 5 mg in triphosphate lamps with a normal lifetime
- 2c. Mercury in straight fluorescent lamps for general purposes not exceeding 8 mg in triphosphate lamps with long lifetime
- 3. Mercury in straight fluorescent lamps for special purposes.
- 4. Mercury in other lamps not specifically mentioned in this list.
- 5. Lead in glass of cathode ray tubes, electronic components and fluorescent tubes.
- 6a. Lead as an alloying element in steel containing up to 0.35% lead by weight.
- 6b. Lead as an alloying element in aluminum containing up to 0.4% lead by weight.
- 6c. Lead as an alloying element in copper containing up to 4% lead by weight.
- 7a. Lead in high melting temperature type solders (i.e. lead based solder alloys containing 85% by weight or more lead).
- 7b. Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission as well as network management for telecommunications.

- 7c. Lead in electronic ceramic parts (e.g. piezoelectronic devices).
- 8. Cadmium and its compounds in electrical contacts and cadmium plating except for applications banned under Directive 91/338/EEC amending Directive 76/769/EEC relating to restrictions on the marketing and use of certain dangerous substances and preparations piezoelectronic devices).
- 9. Hexavalent chromium as an anti-corrosion of the carbon steel cooling system in absorption refrigerators
- 10a. Deca BDE in polymeric applications
- 10b. Lead in lead-bronze bearing shells
- 11. Lead used in compliant pin connector systems.
- 12. Lead as a coating material for a thermal conduction module c-ring.
- 13a. Lead in optical and filter glass.
- 13b. Cadmium in optical and filter glass.
- 14. Lead in solders consisting of more than two elements for the connection between the pins and the package of microprocessors with a lead content of more than 80% and less than 85% by weight .
- 15. Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit Flip Chip packages.

### 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

## 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:** +P Inserts a New Part +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
															-	+	
+P -P	TAJ/TPS E case	+M -M	moulding mass	186.47	mg	+C -C	Supplier	resin	+S -S	phenol-formald	9003-35-4		186.47	mg	50	50	1,000,0
		+M -M	anode body	300.865	mg	+C -C	Supplier	tantalum	+S -S	tantalum oxide			249.5	mg	50	50	816,62
						+C -C	Supplier	tantalum wire	+S -S	tantalum wire	7440-25-7		3.04	mg	50	50	25,062
						+C -C	Supplier	cathode	+S -S	MnO2	1313-13-9		47.156	mg	50	50	154,34
						+C -C	Supplier	barrier	+S -S	graphite	7782-42-5		1.098	mg	50	50	3,604
						+C -C	Supplier	moisture barrier	+S -S	polymethylhyd	63148-62-9		0.05	mg	50	50	169
						+C -C	Supplier	wire protection	+S -S	teflon	9002-84-0		0.022	mg	50	50	198
		+M -M	silver layer	7	mg	+C -C	Supplier	silver	+S -S	silver particles	7440-22-4		6.636	mg	50	50	948,33
						+C -C	Supplier	resin	+S -S	bisphenol A-(e	25068-38-6		0.364	mg	50	50	51,667
		+M -M	silver paste	0.718	mg	+C -C	Supplier	silver	+S -S	silver particles	7440-22-4		0.619	mg	50	50	861,70
						+C -C	Supplier	epoxy	+S -S	epoxy resin, B	68610-73-1		0.099	mg	50	50	138,29
		+M -M	termination base	33.889	mg	+C -C	Supplier	nickel	+S -S	Ni	7440-02-0		0.881	mg	50	50	25,997
						+C -C	Supplier	copper	+S -S	Cu	7440-50-8		32.127	mg	50	50	948,00
						+C -C	Supplier	iron	+S -S	Fe	7439-89-6		0.881	mg	50	50	25,997
		+M -M	termination plati	2.458	mg	+C -C	Supplier	tin	+S -S	Sn	7440-31-5		2.356	mg	50	50	957,69
						+C -C	Supplier	nickel	+S -S	Ni	7440-02-0		0.051	mg	50	50	21,154
						+C -C	Supplier	silver	+S -S	Ag	7440-22-4		0.051	mg	50	50	21,154

## Homogeneous Material Composition Declaration for Electronic Products

**Requester Instructions:** The requester can optionally include additional substance categories and substances that must be declared for the item on this form. This is in addition to JIG Level A and JIG Level B substances already included for the JIG section. The requester should enter additional substance categories and then enter name of the substance and the CAS number. These entries will be accessible to the supplier via Level drop-down by selecting "Requester". Use the Load "Requester" and Test button to view the entries, just select "Requester" in the Level drop-down list in the previous section.

		Substance Category			Substance	CAS
+C	-C		+S	-S		
Update Level "Requester" and Test					Clear Level "Requester" values	