



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 * Request/Reply	Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Materials and Mfg Informat
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Requester Information Lock Request Fields

Company Name *	Company Unique ID	Unique ID Authority	Request Date *	Request Document ID	Respond By Date
Murata Power Solutions, Inc.			2022-11-11		
Contact Name *	Contact Title	Contact Phone *	Contact Email *	Requester Comments or URL for Additional Information	
Lily Gan			lily.gan@murata.com		
My supplier ID	The File Type and Destination fields control how the form is submitted by the supplier. Consult your IT staff for configuration.		File Type PDF	Destination - URL or Email Address	<input type="checkbox"/> Supplier provides Mfr Item Version & Manufacturing Site.
Item Number *	Item Name	Mfr Item Number *	Mfr Item Name	Mfr Item Version	Manufacturing Site
		MMSZ5243BT1G	MMSZ52	1	CN1

Supplier Information

Company Name *	Company Unique ID	Unique ID Authority	Response Date *	Response Document ID				
onsemi			2022-11-11					
Contact Name *	Title - Contact	Phone - Contact *	Email - Contact *	Duplicate Contact -> Authorized Representative				
Product-Env-Stewards	Product Enviro Compliance Eng	NA	Product-Env-Stewards@onse					
Authorized Representative *	Title - Representative	Phone - Representative *	Email - Representative *	Supplier Comments or URL for Additional Information				
Product-Env-Stewards	Product Enviro Compliance Eng	NA	Product-Env-Stewards@onse					
Requester Item Number	Mfr Item Number	Mfr Item Name	Effective Date	Version	Manufacturing Site	Weight *	UOM	Unit Type
	MMSZ5243BT1G	MMSZ52	2022-11-11	1	CN1	11.525	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) - annealed	CU Alloy	1	260 C	30 seconds	3
Comments					
level 1 - maximum time at peak temperature during soldering is 10-30 seconds					

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 *

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, 2015/863/EU amending RoHS Directive 2011/65/EU and implemented by the laws of the European Union member states) of the part identified on this form contains lead, mercury, cadmium, hexavalentchromium, 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 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

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		Tolerance		PPM
																						-	+	
+I	-I	+M	-M	Die	0.88	mg	+C	-C	Supplier	+S	-S	Silicon (Si)	7440-21-3	0.88	mg									
		+M	-M	Lead Frame	3.19	mg	+C	-C	B	+S	-S	Nickel (Ni)	7440-02-0	1.15797	mg									
							+C	-C	Supplier	+S	-S	Iron (Fe)	7439-89-6	1.60138	mg									
							+C	-C	Supplier	+S	-S	Copper (Cu)	7440-50-8	0.43065	mg									
		+M	-M	Mold Compound	6.51	mg	+C	-C	Supplier	+S	-S	Boron zinc hydroxide o	138265-88-0	0.1953	mg									
							+C	-C	Supplier	+S	-S	Zinc Monoxide (ZnO)	1314-13-2	0.03255	mg									
							+C	-C	Supplier	+S	-S	2,4,6-triamino-1,3,5-triaz	37640-57-6	0.1953	mg									
							+C	-C	Supplier	+S	-S	Silica Amorphous (SiO2)	7631-86-9	5.208	mg									
							+C	-C	Supplier	+S	-S	Carbon Black (C)	1333-86-4	0.0651	mg									
							+C	-C	Supplier	+S	-S	Ortho-Cresol Novolac R	29690-82-2	0.5208	mg									
							+C	-C	Supplier	+S	-S	Phenolic Resin (Novola	9003-35-4	0.29295	mg									
		+M	-M	Plating	0.8	mg	+C	-C	Supplier	+S	-S	Tin (Sn)	7440-31-5	0.8	mg									
		+M	-M	Wire Bond	0.145	mg	+C	-C	Supplier	+S	-S	Palladium (Pd)	7440-05-3	0.001885	mg									
							+C	-C	Supplier	+S	-S	Copper (Cu)	7440-50-8	0.143115	mg									

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