



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.

1752-21.1	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 Information
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Supplier Information

Company name* onsemi	Company unique ID	Unique ID Authority	Response Date* 2024-12-03
Contact Name Product-Env-Stewards	Title - Contact Product Enviro Compliance	Phone - Contact* NA	Email - Contact* Product-Env-Stewards@onsemi.com
Authorized Representative* Product-Env-Stewards	Title - Representative Product Enviro Compliance	Phone - Representative* NA	Email - Representative* Product-Env-Stewards@onsemi.com

Requester Item Number	Mfr Item Number	Mfr Item Name	Effective Date	Version	Manufacturing Site	Weight*	UOM	Unit Type
	NXH020U90MNF2PT G	PIM F2 900V 20mohm Full SiC Vienna Rectifier	2024-12-03		CNG	39679.32	mg	Each

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	NA	0 C	30 seconds	3

Comments

For more information regarding material composition please refer to page 3

RoHS Material Composition Declaration		Declaration Type *	Detailed
Directive 2015/863/EU amending RoHS Directive 2011/65/EU	RoHS Definition: Quantity limit of 0.01% by mass (100 PPM) in homogeneous material for Cadmium and quantity limit of 0.1% by mass (1000 PPM) in homogeneous material for: Lead (Pb), Mercury (Hg), Hexavalent Chromium (Cr6+), Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE), and Bis(2-ethylhexyl) phthalate (DEHP), Benzyl-butyl phthalate (BBP), Dibutyl phthalate (DBP), Diisobutyl phthalate (DIBP).		
<p>Please indicate whether any homogeneous material (as defined by the RoHS Directive, EU 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.</p>			
RoHS Declaration *	1 - Item(s) does not contain RoHS restricted substances per the definition above		Supplier Acceptance * Accepted
Exemption: 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.			
Exemption List Version	EL-2011/534/EU		
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	Rastislav Drska		

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).

Homogeneous Material	Weight	Unit of Measure	Level	Substance	CAS	Exempt	Weight	Unit of Measure
Capacitors Ceramic	185.0	mg	Supplier	Titanium (Ti)	7440-32-6		31.228	mg
			Supplier	Tin (Sn)	7440-31-5		0.888	mg
			Supplier	Oxygen (O2)	7782-44-7		37.629	mg
			Supplier	Barium (Ba)	7440-39-3		91.8155	mg
			B	Nickel (Ni)	7440-02-0		18.093	mg
			Supplier	Copper (Cu)	7440-50-8		5.3465	mg
Case	19227.2	mg	Supplier	Fiber Glass (SiO2)	65997-17-3		5768.1602	mg
			Supplier	Poly(ButyleneTerephthalate)	30965-26-5		5383.6157	mg
			B	Antimony Trioxide (Sb2O3)	1309-64-4		672.952	mg
			Supplier	PBT	26062-94-2		5383.6157	mg
			-	Carbonic Dichloride	94334-64-2		2018.8558	mg
DBC	11413.0	mg	Supplier	Aluminum Trioxide (Al2O3)	1344-28-1		4565.2002	mg
			B	Nickel (Ni)	7440-02-0		114.13	mg
			Supplier	Copper (Cu)	7440-50-8		6733.6699	mg
Die	294.0	mg	Supplier	Silicon Carbide	409-21-2		294	mg
Glue	543.9	mg	Supplier	2,3-epoxypropyl-trimethoxysilan	2530-83-8		54.39	mg
			Supplier	Miscellaneous	Trade Secret		54.39	mg
			Supplier	Silica Crystalline (SiO2)	14808-60-7		435.12	mg
Interconnect	205.22	mg	Supplier	Distillate (petroleum), Hydrotreated	64742-47-8		20.522	mg
			Supplier	Aluminum (Al)	7429-90-5		184.698	mg
Protective Coating	5600.0	mg	Supplier	Poly(dimethylsiloxane), hydroxy terminated	70131-67-8		2800	mg
			Supplier	Ethylbenzene	100-41-4		560	mg
			Supplier	Filler (SiO2)	68909-20-6		1064	mg
			Supplier	Misc.	Proprietary Data		56	mg
			Supplier	Xylene	1330-20-7		1120	mg
Terminal	2140.0	mg	Supplier	Silicon (Si)	7440-21-3		5.778	mg
			B	Nickel (Ni)	7440-02-0		28.89	mg
			Supplier	Copper (Cu)	7440-50-8		2104.7971	mg
			Supplier	Phosphorus (P)	7723-14-0		0.535	mg
Thermistor	13.0	mg	Supplier	Tin (Sn)	7440-31-5		0.1625	mg
			Supplier	Nickel Oxide (NiO)	1313-99-1		0.0195	mg

			B	Antimony Trioxide (Sb2O3)	1309-64-4		0.0208	mg
			B	Nickel (Ni)	7440-02-0		3.0355	mg
			Supplier	Gold (Au)	7440-57-5		0.0026	mg
			Supplier	Iron (Fe)	7439-89-6		3.25	mg
			A	Lead Oxide (PbO)	1317-36-8		2.9796	mg
			Supplier	Cobalt Oxide (Co3O4)	1308-06-1		0.0195	mg
			Supplier	Manganese Tetraoxide (Mn3O4)	1317-35-7		0.0195	mg
			Supplier	Potassium Monoxide (K2O)	12136-45-7		0.2522	mg
			Supplier	Copper (Cu)	7440-50-8		1.4365	mg
			Supplier	Silica Crystalline (SiO2)	14808-60-7		1.8018	mg
Wire Bond - Al	58.0	mg	Supplier	Aluminum (Al)	7429-90-5		58	mg