ASSOCIATION CONNECTING ELECTRONICS INDUSTRIES	Material Composition Declaration © Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved under both international and Pan-American copyright conventions.			der both	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.									
752-21.1	IPC Web Site for Information on IPC-1752 Standard Form Typ http://www.ipc.org/IPC-175x Distribute				Form Type Distribute	* Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Materi				ials and Mfc Information				
upplier Inform	ation													
Company name*			Company unique ID			J	Unique ID Authority				Response Date*			
nsemi											2024-05-17			
Contact Name			Title - Contact			I	Phone - Contact*				Email - Contact*			
Product-Env-Stewards			Product Enviro Compliance				NA				Product-Env-Stewards@onsemi.com			
Authorized Representative*			Title - Representative			I	Phone - Representative*				Email - Representative*			
Product-Env-Stewards			Product Enviro Compliance				NA				Product-Env-Stewards@onsemi.com			
Requester	r Item Number			ber Mfr Item Name			Effective Date	Version	N	Manufacturing Site	V	Veight*	UOM	Unit Type
				SS SOT223 HC XS	SS SOT223 HC XSTR NPN 20V		2024-05-17		N	MY1		09.99	mg	Each
	Process Information		. 10	A.11	CEE 020 1.22	D.:	D 15	D 1 7	,	M mi . D i	The state of the s		CD CL C	
2			Terminal Base Alloy J-STD-020 MS		_ Rating	Peak Process Body Tempe		Т,				er of Reflow Cyc	eles	
•	(Sn) - annealed	C	U Alloy	1			260		C	30	second	ds   3		
omments														
	me at peak temperature													
or more informatio	on regarding material co	omposition p	please refer t	page 3										

RoHS Material Composition Declaration			Declaration Type *	Detailed						
Directive 2015/863/EU amending RoHS Directive 2011/65/EU										
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 inexcess 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 knowledges 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 neutrino a written agreement with respect to the identified part, the terms and conditions of that agreement, including any warranty rights and/or remedies of Supplier's Standard Terms and Conditions of Sale applicable to such part shall apply.										
RoHS Declaration * 4 - Item(s	) does not contain RoHS restricted substance	s per the definition above except for selected exemp	tions Supplier Acceptance	* Accepted						
Exemption: 7a: Lead in high melting temperature type solders (i.e. lead based solder alloys containing 85% by weight or more lead).										
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 Ra	astislav Drska	-En								

## **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
Die	3.3	mg	Supplier	Silicon (Si)	7440-21-3		3.3	mg
Die Attach Solder	2.37	mg	Supplier	Silver (Ag)	7440-22-4		0.0592	mg
			A	Lead (Pb)	7439-92-1	7a	2.2633	mg
			Supplier	Tin (Sn)	7440-31-5		0.0474	mg
Lead Frame	37.17		Supplier	Silver (Ag)	7440-22-4		0.4832	mg
			Supplier	Zinc (Zn)	7440-66-6		0.0372	mg
			Supplier	Iron (Fe)	7439-89-6		0.8921	mg
			Supplier	Copper (Cu)	7440-50-8		35.7575	mg
Mold Compound-Black	59.7	mg		Epoxy resin	proprietary data		4.179	mg
			Supplier	Phenolic Resin	Proprietary Data		1.791	mg
			Supplier	Silica Amorphous (SiO2)	7631-86-9		5.97	mg
			Supplier	Carbon Black (C)	1333-86-4		0.2985	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		47.4615	mg
Plating	7.44	mg	Supplier	Tin (Sn)	7440-31-5		7.44	mg
Wire Bond - Cu	0.01	mg	Supplier	Copper (Cu)	7440-50-8		0.01	mg