



# 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 <a href="http://www.ipc.org/IPC-175x">http://www.ipc.org/IPC-175x</a>	Form Type * Distribute	Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Materials and Mfg Informat
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## Supplier Information

Company Name * Anaren Microwave	Company Unique ID	Unique ID Authority	Response Date * 2020-05-07	Response Document ID				
Contact Name * Sarvesh Nair	Title - Contact Project Engineer	Phone - Contact * 315-233-5510	Email - Contact * Sarvesh.Nair@ttm.com					
Authorized Representative * Sarvesh Nair	Title - Representative Project Engineer	Phone - Representative * 315-233-5510	Email - Representative * Sarvesh.Nair@ttm.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
	D10AA9Z4	Surface Mount Attenuator, 10W	2020-05-07	C	East Syracuse	0.0334063	g	Each
Alternate Recommendation				Alternate Item Comments				

## Manufacturing Process Information

Terminal Plating / Grid Array Material Matte Tin (Sn) - with Nickel (Ni) barrier	Terminal Base Alloy Other	J-STD-020 MSL Rating 1	Peak Process Body Temperature 260 C	Max Time at Peak Temperature 30 seconds	Number of Reflow Cycles 3
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Comments  
Compliant to RoHS 2 Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 & Commission Delegated Directive 2015/863/EU of 31 March 2015.

Save the fields in this form to a file

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Import Data

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## 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 \*** 4 - Item(s) does not contain RoHS restricted substances per the definition above except for selected exemptions

**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.

Exemption List Version EL-2006/690/EC

7c. Lead in electronic ceramic parts (e.g. piezoelectronic devices).

## 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	Unit of Measure	Tolerance		PPM
												-	+	
	D10AA9Z4	Substrate	0.031532g		Supplier	Substrate	Aluminum Oxide (Al <sub>2</sub> O <sub>3</sub> )	1344-28-1		0.030271g				960,00
					Supplier	Substrate	Proprietary/Unknown	Proprietary		0.001261g				40,000
		Conductor	0.000653g		Supplier	Conductor	Silver (Ag)	7440-22-4		0.000522g				800,00
					Supplier	Conductor	Lead Containing Glass	65997-18-4		0.000130g				200,00
		Thick Film Resis	0.000128g		Supplier	Thick Film Resistor	Silver (Ag)	7440-22-4		0.000012g				99,120
					Supplier	Thick Film Resistor	Ruthenium(IV) dioxide (	12036-10-1		0.000018g				146,44
					Supplier	Thick Film Resistor	Palladium (Pd)	7440-05-3		0.000004g				35,790
					Supplier	Thick Film Resistor	Lead Containing Glass	65997-18-4		0.000092g				718,65
		Protective Glaze	0.000197g		Supplier	Protective Glaze	Proprietary/Unknown	Proprietary		0.000005g				26,000
					Supplier	Protective Glaze	Chromium(III) oxide (Cr	1308-38-9		0.000002g				14,700
					Supplier	Protective Glaze	Lead Containing Glass	65997-18-4		0.000189g				959,30
		Protective Polym	0.000462g		Supplier	Protective Polymer	*Proprietary Metal Com	Proprietary		0.000046g				100,00
					Supplier	Protective Polymer	*Proprietary Blue Pigme	Proprietary		0.000092g				200,00
					Supplier	Protective Polymer	Cobalt (Co)	7440-48-4		0.000138g				300,00
					Supplier	Protective Polymer	Molybdenum (Mo)	7439-98-7		0.000185g				400,00
		Part Marking Ink	0.000003g		Supplier	Part Marking Ink	Titanium dioxide (TiO <sub>2</sub> )	13463-67-7		0.000003g				857,10
					Supplier	Part Marking Ink	Silica amorphous (SiO <sub>2</sub> )	7631-86-9		0.000000g				142,90
		Nickel Plating	0.000302g		A	Lead/Lead Compound	Lead	7439-92-1		0.000000g				499,75
					B	Nickel (external applic	Nickel	7440-02-0		0.000301g				999,50
		Tin Plating	0.000125g		Supplier	Tin Plating	Tin (Sn)	7440-31-5		0.000125g				1,000,0