IPC
ASSOCIATION CONNECTING ELECTRONICS INDUSTRIES®

Material Composition Declaration

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 *** **Distribute**	**Declaration Class *** **Class 6 - RoHS Yes/No, Homogeneous Materials and Mfg Informat**

Supplier Information

Company Name * **Anaren Microwave**	Company Unique ID	Unique ID Authority	**Response Date *** **2020-12-14**	Response Document ID
Contact Name * **Herbert Jones**	Title - Contact Project Engineer	**Phone - Contact *** **315-233-5510**	**Email - Contact *** **herbert.jones@ttm.com**	Duplicate Contact -> Authorized Representative
Authorized Representative * **Herbert Jones**	Title - Representative Project Engineer	**Phone - Representative *** **315-233-5510**	**Email - Representative** * **herbert.jones@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
	C200N50Z4B	Surface Mount Termination, 200	2020-12-14	A	East Syracuse	0.28311	g	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) - with Nickel (Ni) barrier	**CU Alloy**	**1**	**260** C	**30** seconds	**3**

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.

*** Required Field**

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 *	**Custom**

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

RoHS 2 (Directive 2011/65/EU & 2015/863/EU) Definition Addendum: Quantity limit of 0.1% by mass (1000 PPM) in homogeneous material for: Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP), Diisobutyl phthalate (DIBP).

Supplier certifies that it gathered the information it provides in this form concerning RoHS restrictive substances 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.

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	Brown, Devin	Digitally signed by Brown, Devin Date: 2020.12.14 09:31:40 -05'00'	

*** Required Field**

CAS Registry Number(R) is a Registered Trademark of the American Chemical Society

Form enabled by Adobe

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
															-	+	
+I -I	C200N50Z4B	+M -M	Part Marking Ink	0.000020	g	+C -C	Supplier	Part Marking Ink	+S -S	Titanium dioxide (TiO2)	13463-67-7		0.000017	g			857,10
						+C -C	Supplier	Part Marking Ink	+S -S	Silica amorphous (SiO2	7631-86-9		0.000002	g			142,90
		+M -M	Protective Glaze	0.005935	g	+C -C	Supplier	Protective Glaze	+S -S	Boron Oxide (BO)	1303-86-2		0.000492	g			83,027
						+C -C	Supplier	Protective Glaze	+S -S	Aluminum Oxide (Al2O3	1344-28-1		0.000147	g			24,912
						+C -C	Supplier	Protective Glaze	+S -S	Silicon Dioxide (SiO2)	14808-60-7		0.000147	g			24,912
						+C -C	Supplier	Protective Glaze	+S -S	*Proprietary Metal Com	Proprietary		0.000363	g			61,256
						+C -C	Supplier	Protective Glaze	+S -S	*Proprietary Blue Pigme	Proprietary		0.000727	g			122,51
						+C -C	Supplier	Protective Glaze	+S -S	Chromium(III) oxide (Cr	1308-38-9		0.000032	g			5,501.6
						+C -C	Supplier	Protective Glaze	+S -S	Cobalt (Co)	7440-48-4		0.001090	g			183,76
						+C -C	Supplier	Protective Glaze	+S -S	Molybdenum (Mo)	7439-98-7		0.001454	g			245,02
						+C -C	Supplier	Protective Glaze	+S -S	Zinc oxide (ZnO)	1314-13-2		0.001478	g			249,08
		+M -M	Thick Film Resis	0.001393	g	+C -C	Supplier	Thick Film Resistor	+S -S	Boron Oxide (BO)	1303-86-2		0.000187	g			134,60
						+C -C	Supplier	Thick Film Resistor	+S -S	Magnesium Oxide (MgO	1309-48-4		0.000134	g			96,200
						+C -C	Supplier	Thick Film Resistor	+S -S	Aluminum Oxide (Al2O3	1344-28-1		0.000187	g			134,60
						+C -C	Supplier	Thick Film Resistor	+S -S	Silicon Dioxide (SiO2)	14808-60-7		0.000071	g			51,300
						+C -C	Supplier	Thick Film Resistor	+S -S	Ruthenium(IV) dioxide (	12036-10-1		0.000688	g			493,60
						+C -C	Supplier	Thick Film Resistor	+S -S	Zinc oxide (ZnO)	1314-13-2		0.000125	g			89,700
		+M -M	Conductor	0.008583	g	+C -C	Supplier	Conductor	+S -S	Silver (Ag)	7440-22-4		0.007810	g			910,00
						+C -C	Supplier	Conductor	+S -S	Cobalt (Co)	7440-48-4		0.000128	g			15,000
						+C -C	Supplier	Conductor	+S -S	Titanium (Ti)	7440-32-6		0.000643	g			75,000
		+M -M	Substrate	0.262820	g	+C -C	Supplier	Substrate	+S -S	Aluminum Nitride (ALN	24304-00-5		0.249679	g			950,00
						+C -C	Supplier	Substrate	+S -S	Yttrium (III) oxide (Y2O3	1314-36-9		0.013141	g			50,000
		+M -M	Nickel Plating	0.003316	g	+C -C	A	Lead/Lead Compound	+S -S	Lead	7439-92-1		0.000001	g			499.75

*** Required Field**

					+C	-C	B	Nickel (external applic	+S	-S	Nickel	7440-02-0		0.003314	g			999,50
+M	-M	Tin Plating	0.001034	g	+C	-C	Supplier	Tin Plating	+S	-S	Tin (Sn)	7440-31-5		0.001034	g			1,000,0