


MATERIAL DECLARATION



Material Number	SM42P01EL			
Product Line	LAN Transformer Module			
Compliance Date	2019/11/28			
RoHS Compliant	Yes	MSL	Level 1	

No.	Construction Element(subpart)	Homogeneous Material	Material weight [g]	Homogeneous Material\ Substances	CASRN if applicable	Materials Mass %	Material Mass % of total unit wt.	Subpart mass of total wt. (%)
PCB								
1-1	Cupreous clad laminate	CCL	0.23132304	Copper	7440-50-8	53	8.92944	16.84
				GLASS FABRIC	65997-17-3	40	6.7392	
				Epoxy Resin	61788-97-4	7	1.17936	
1-2	Marking-Black Ink	Liquid photoimageable solder mask	0.008915576	Barium sulfate	7727-43-7	63.425	0.411850238	0.64
				Carbon Black	1333-86-4	21.142	0.137285577	
				Silica	14464-46-1	10.571	0.068642789	
				Dibasic ester	95481-62-2	2.114	0.013727259	
				2-Isopropylthioxanthone	5495-84-1	2.114	0.013727259	
				Melamine	108-78-1	0.634	0.004116879	
1-3	Marking-White Ink	Thermal curable marking ink	0.000481923	Poly[(o-cresyl glycidyl ether)-co-formaldehyde]	29690-82-2	20	0.00702	0.04
				Poly(bisphenol-A-co-epichlorohydrin)	25068-38-6	20	0.00702	
				Dibasic ester	95481-62-2	10	0.00351	
				Silica	14464-46-1	10	0.00351	
				Titanium dioxide	13463-67-7	30	0.01053	
				Dicyanodiamide	461-58-5	5	0.001755	
				Silicone	63148-62-9	5	0.001755	
1-4	IMMERSION GOLD PCB	IMMERSION GOLD PCB	0.000240962	Nickel	7440-02-0	98	0.017199	0.02
				Gold	7440-57-5	2	0.000351	

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Common Mode Choke Coil x 4								
2-1	Ferrite body	Ferrite Ni-Zn Series	0.03700235	Iron oxide	1309-37-1	62.000	1.671	2.69
				Nickel oxide	1313-99-1	11.000	0.296	
				Zinc oxide	1314-13-2	20.000	0.539	
				Copper oxide	1317-38-0	7.000	0.189	
2-2	Copper/ Coating	Copper Wire	0.0057666	Copper	7440-50-8	100.000	0.420	0.52
		Copper Colored Coating On The Magnet Wire_SFHW	0.00144165	Polyurethane Resin	26680-22-8	100.000	0.105	
2-3	Terminal	Silver paste_DP4303W	0.00144165	Silver	7440-22-4	73.700	0.077	0.11
				Silicon dioxide	60676-86-0	15.800	0.017	
				Resins	9004-57-3	10.500	0.011	
2-4	Solder Base	S Nickel Pellets	0.00048055	Nickel	7440-02-0	100.000	0.04	0.04
2-5	Solder	Lead Free Solder	0.00048055	Tin	7440-31-5	100.000	0.04	0.04
2-6	Adhesive	EPOXY_ME-5890LC	0.00144165	Epoxy resin	61788-97-4	50.000	0.053	0.11
				Carbon black	1333-86-4	46.000	0.048	
				Acrylated Aliphatic Urethane	68987-79-1	4.000	0.004	
SMD Pulse Transformer x 4								
3-1	Ferrite body	Ferrite Ni-Zn Series	0.524352133	Iron oxide	1309-37-1	62.000	23.678	38.19
				Nickel oxide	1313-99-1	11.000	4.201	
				Zinc oxide	1314-13-2	20.000	7.638	
				Copper oxide	1317-38-0	7.000	2.673	
3-2	Copper/ Coating	Copper Wire	0.08015574	Copper	7440-50-8	100.000	5.838	7.30
		Copper Colored Coating On The Magnet Wire_SFHW	0.020038935	Polyurethane Resin	26680-22-8	100.000	1.460	
3-3	Terminal	Silver paste_DP4303W	0.016699113	Silver	7440-22-4	73.700	0.896	1.22
				Silicon dioxide	60676-86-0	15.800	0.192	

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				Resins	9004-57-3	10.500	0.128	
3-4	Solder Base	S Nickel Pellets	0.003339823	Nickel	7440-02-0	100.000	0.243	0.24
3-5	Solder	Lead Free Solder	0.003339823	Tin	7440-31-5	100.000	0.243	0.24
3-6	Adhesive	EPOXY_ME-5890LC	0.020038935	Epoxy resin	61788-97-4	50.000	0.730	1.46
				Carbon black	1333-86-4	46.000	0.671	
				Acrylated Aliphatic Urethane	68987-79-1	4.000	0.058	
Iron shell								
4	STAINLESS STEEL STRIP	STEEL STRIP	0.3609617	Stainless steel	12597-68-1	94.900	24.949	26.29
	Plating-Ni	Nickel		Nickel	7440-02-0	5.100	1.341	
Solder Paste								
5	Solder	Lead Free Solder	0.0550573	Tin	7440-31-5	98.500	3.950	4.01
				Silver	7440-22-4	1.000	0.040	
				Copper	7440-50-8	0.500	0.020	
Total weight			1.373					

This Document was updated on: 2022/06/20

Important remarks:

1. It is the responsibility of the user to verify they are accessing the latest version.
2. **(16)**

Instructions: Please note, an example of a completed form follows these instructions.

A Material Declaration sheet is to be completed for each product family or variation of a product family regardless of RoHS compliance status.

The following information is to be placed into the appropriate space on the form:

- 1) Material Group Number (Model number).

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- 2) Brief description of the product line (i.e.; Panel Control; Chip Resistor; Line Protection Module, etc.).
- 3) The date the product family was determined to be Rohs compliant, leave blank if no RoHS version is available.
- 4) Yes or No.
- 5) Moisture Sensitivity Rating from J-STD-020C which can be found by going to the Bourns Intranet
 - a. Clicking on "Departments"
 - b. Clicking on "Environmental, Health and Safety"
 - c. Clicking on "Product Compliance Documents"
 - d. Clicking on "JEDEC Standards"
 - e. Clicking on "J-STD-020C" to open; scroll to page 13, table 5.1
- 6) Brief text description of the construction element of the product (i.e.; housing, contact spring, terminal, circuit board, etc.). Place each element on its own line.
- 7) Homogeneous Material Description (i.e.; Nylon, Brass, Stainless steel, etc.) no Proprietary information is to be used.
- 8) The weight, in grams, of the Construction element to four decimal places max.
- 9) The basic constituents of the homogeneous materials (i.e.; for stainless steel it might be carbon, manganese, silicon, chromium, nickel, iron) each constituent on its own line with in the major line of the homogeneous material.
- 10) CAS number for each of the constituent materials. A list of substances currently being used can be found in the Outlook Public folders under RoHS Information.
- 11) The weight of the individual substances from item (9) divided by the total Material weight of item (8) expressed as a percentage. 3 decimal places max. Ranges are acceptable for Non-Hazardous materials – however, use the average of the range for the percentage calculation. For hazardous Materials - use the maximum of the range listed. If the maximum number confirms NON-COMPLIANCE, contact the material supplier for range clarification.
- 12) The weight of the individual substances from item (9) divided by the total weight of the component (14) expressed as a percentage. 3 decimal places max.
- 13) The sum of the percentages of item (12) for the construction element (6) expressed as a percentage. 2 decimal places max.
- 14) The total weight of the component in grams. 4 decimal places max.
- 15) The actual date the document was created. Month/Day/Year format.
- 16) Any appropriate notes (i.e, ordering format or suffix requirements).
- 17) Appropriate Photographs or graphic representation of the product. Usually the same as the data sheet picture.