MATERIAL DECLARATION SHEET

BOURNS®

Material Number	SM42P01EL			Place picture here 
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	16.85
				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	63.83	0.414480105	0.65
				Carbon Black	1333-86-4	21.276	0.138155706	
				Silica	14464-46-1	10.638	0.069077853	
				Dibasic ester	95481-62-2	2.128	0.013818168	
				2-Isopropylthioxanthone	5495-84-1	2.128	0.013818168	
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	

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	2.70
				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	0.53
		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	0.035	0.04
2-5	Solder	Lead Free Solder	0.00048055	Tin	7440-31-5	100.000	0.035	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 Plating-Ni	STEEL STRIP Nickel	0.3609617	Carbon	7440-44-0	0.1500	0.039	26.29
				Chromium	7440-47-3	18.000	4.206	
				Iron	7439-89-6	71.300	18.745	
				Manganese	7439-96-5	7.500	1.577	
				Nitrogen	7727-37-9	0.250	0.066	
				Nickel	7440-02-0	5.500	1.375	
				Phosphorus	7723-14-0	0.060	0.013	
				Sulphur	7704-34-9	0.030	0.005	
				Silicon	7440-21-3	1.000	0.263	
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: 2023/02/24

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).
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 it 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.