

MATERIAL DECLARATION SHEET



Material Number	SSA-2-100A		
Product Line	Sensors & Controls		
Compliance Date	11/7/2024		
RoHS Compliant	Yes	MSL	N/A

No.	Construction Element (subpart)	Homogeneous Material	Material weight [g]	Homogeneous Material/ Substances	CASRN	Materials Mass %	Material Mass % of total unit wt.	Subpart mass of total wt. (%)
					if applicable			
1	Multilayer	Electro plating	0.00004	Nickel	7440-02-0	100	0.00007	0.02380
			0.00015	Copper	7440-50-8	100	0.00025	
			0.00022	Tin	7440-31-5	100	0.00037	
		Silver Electrode	0.00048	Silver	7440-22-4	100	0.00082	
			Terminal Electrode	0.00032	Silver	7440-22-4	88	
		Silicon dioxide			60676-86-0	4	0.00002	
		Glass without declarable substances materials			-	8	0.00004	
		Multilayer Ferrite Inductors	0.01279	Copper	7440-50-8	4	0.00087	
				Nickel	7440-02-0	3	0.00065	
				Ferrite	7439-89-6	89	0.01935	
Zinc	7440-66-6			4	0.00087			
2	Electrical Connector 1	Body	0.18	Carbon black	1333-86-4	10	0.03059	0.61565
				Liquid Crystal Polymer	70679-92-4	50	0.15297	
				Further Additives, not to declare	system	10	0.03059	
				Glass Fiber	65997-17-3	30	0.09178	
		Terminals	0.172	Copper	7440-50-8	85	0.24850	

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				Zinc	7440-66-6	15	0.04385	
		Nickel underplating	0.0064	Nickel	7440-02-0	100	0.01088	
		Tin underplating	0.0034	TIN	7440-31-5	100	0.00578	
		Gold Plating	0.000408	Cobalt	7440-48-4	10	0.00007	
				Nickel	7440-02-0	10	0.00007	
				Gold	7440-57-5	80	0.00055	
3	Electrical Connector 2 (X2)	Body	0.68	Carbon black	1333-86-4	10	0.11558	1.80920
				Liquid Crystal Polymer	70679-92-4	60	0.69348	
				Further Additives, not to declare	system	10	0.11558	
				Glass Fiber	65997-17-3	30	0.34674	
		Terminals	0.364	Copper	7440-50-8	85	0.52589	
				Zinc	7440-66-6	15	0.09280	
		Nickel underplating	0.0128	Nickel	7440-02-0	100	0.02176	
				Tin underplating	0.0068	TIN	7440-31-5	
		Gold Plating	0.000816	Cobalt	7440-48-4	10	0.00014	
				Nickel	7440-02-0	10	0.00014	
Gold	7440-57-5			80	0.00111			
4	Screw (X2)	A2 Stainless-Steel	0.508	Carbon	7440-44-0	0.15	0.00130	0.86345
				Manganese	7439-96-5	2	0.01727	
				Phosphorus	7723-14-0	0.2	0.00173	
				Sulfur	7704-34-9	0.15	0.00130	
				Silicon	7440-21-3	0.9	0.00777	
				Chromium	7440-47-3	18	0.15542	
				Nickel	7440-02-0	9	0.07771	
				Iron	7439-89-6	69	0.59578	

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5	Voltage Regulator			Molybdenum	7439-98-7	0.6	0.00518	0.03000
		Gold wire	0.0089340	Gold	7440-57-5	100	0.01519	
		Die Attach Adhesive	0.0016434	Silver	7440-22-4	79.99993	0.00223	
				Epoxy	85954-11-6	20.00007	0.00056	
		Copper and Its Alloys	0.0054614	Copper	7440-50-8	97.41	0.00904	
				Iron	7439-89-6	2.38	0.00022	
				Phosphorus	7723-14-0	0.083994	0.00001	
				Zinc	7440-66-6	0.126006	0.00001	
		Lead Frame Plating	0.0012400	Nickel	7440-02-0	95.11982	0.00200	
				Gold	7440-57-5	0.780172	0.00002	
				Palladium	7440-05-3	4.1	0.00009	
		Mold Compound	0.0000849	Fused Silica	60676-86-0	85.9999	0.00012	
				Carbon Black	1333-86-4	0.5	0.00000	
Ceramics / Glass	0.0002850	Epoxy	85954-11-6	13.5	0.00002			
		Silicon	7440-21-3	100	0.00029			
6	Diodes & Rectifiers	Die Doped Silicon	0.000208	Silicon	7440-21-3	100	0.00035	0.01772
		Lead Frame	0.0024	Iron	7439-89-6	57.65	0.00235	
				Nickel	7440-02-0	41	5.78923	
				Manganese	7439-96-5	0.6	0.00002	
				Chromium	7440-47-3	0.1	0.00000	
				Cobalt	7440-48-4	0.5	0.00002	
				Silicon	7440-21-3	0.15	0.00001	
		Lead Frame plating	0.000091	Silver	7440-22-4	100	0.00015	
Wire Bonding	0.000052	Gold	7440-57-5	100	0.00009			

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		Molding Compound	0.006601	Silicon Dioxide	7631-86-9	83	0.00931				
				Zinc Oxide	1314-13-2	1	0.00011				
				Phenol-formaldehyde polymer	9003-35-4	10	0.00112				
				Boron zinc hydroxide oxide	138265-88-0	5	0.00056				
				Carbon black	1333-86-4	1	0.00011				
		Die Attach Epoxy	0.00086	Silver	7440-22-4	75	0.00110				
				Epoxy resin	Trade secret	25	0.00037				
		Tin Plating	0.000213	Tin	7440-31-5	100	0.00036				
		7	Voltage Regulators	Bond Wire	0.000023	Gold	7440-57-5		100	0.00004	0.03128
				Die Attach Adhesive	0.000287	Silver	7440-22-4		79.99	0.00039	
Epoxy	85954-11-6					20	0.00010				
Lead Frame	0.006460			Copper	7440-50-8	97.41	0.01070				
				Iron	7439-89-6	2.38	0.00026				
				Phosphorus	7723-14-0	0.08399	0.00001				
				Zinc	7440-66-6	0.126	0.00001				
Lead Frame Plating	0.000116			Nickel	7440-02-0	95.11	0.00019				
				Gold	7440-57-5	0.7801	0.00000				
				Palladium	7440-05-3	4.1	0.00001				
Mold Compound	0.010895			Fused Silica	60676-86-0	85.99	0.01592				
				Carbon Black	1333-86-4	0.5	0.00009				
				Epoxy	85954-11-6	13.5	0.00250				
Ceramics / Glass	0.000623			Doped Silicon	7440-21-3	100	0.00106				

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8	Power Transformers	Header filled thermoplastics.	0.05837	Aluminum hydroxide	21645-51-2	40	0.03968	0.16997
				Glass fiber	65997-17-3	30	0.02976	
				Diallyl phthalate resin	25035-78-3	25	0.02480	
				Antimonyoxide (Sb2O3)	1309-64-4	4.5	0.00446	
				Carbon black	1333-86-4	0.5	0.00050	
		Terminal copper alloys	0.00767	Copper	7440-50-8	93.45	0.01218	
				Tin	7440-31-5	6.05	0.00079	
				Phosphorus	7723-14-0	0.35	0.00005	
				Zinc	7440-66-6	0.1	0.00001	
				Iron	7439-89-6	0.05	0.00001	
		Terminal Plating Special metals	0.0004	Nickel	7440-02-0	34	0.00023	
				Tin	7440-31-5	66	0.00045	
		Ceramics/glass	0.01459	Ironoxide (Fe3O4)	1317-61-9	70	0.01736	
				Manganesoxide (Mn3O4)	1317-35-7	17	0.00422	
				Zincoxide (ZnO)	1314-13-2	13	0.00322	
		Wire Copper	0.003593	Copper	7440-50-8	98.7	0.00603	
				Tin	7440-31-5	1.3	0.00008	
		Wire Lacquers	0.0003460	Polymer with tetrafluoroethene	26655-00-5	99.91	0.00059	
		Solder	0.0041900	Tin	7440-31-5	96	0.00684	
				Silver	7440-22-4	4	0.00028	
Core Coating	0.0001500	Paracyclophane	1633-22-3	99	0.00025			

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				Trade secret	N/A	1	0.0000025	
		Wire Copper In cable harnesses	0.0018391	Copper	7440-50-8	100	0.00313	
		Wire Lacquers	0.0003309	Polyurethane	9009-54-5	94.4	0.00053	
				Polyamide resin	70024-79-2	5.6	0.00003	
		Wire Copper Alloy	0.0014453	Copper	7440-50-8	100	0.00246	
		Wire Tin Plating	0.0000447	Tin	7440-31-5	100	0.00008	
		Wire Isolation Lacquers	0.00153881	polymer with tetrafluoroethene	26655-00-5	99.58	0.00260	
				C.I. Pigment Blue 28	1345-16-0	0.18	0.000005	
				Titanium oxide (TiO ₂)	13463-67-7	0.18	0.000005	
				C.I. Pigment Green 50	68186-85-6	0.06	0.000002	
		Wire Isolation Copper Alloy	0.00093119	Copper	7440-50-8	97.95	0.00155	
				Tin	7440-31-5	2.05	0.00003	
		Adhesive Sealants	0.00239	Bisphenol A Di glycidyl ether resin	25068-38-6	50	0.00203	
				Talc	14807-96-6	14	0.00057	
				Crystalline silica	14808-60-7	10	0.00041	
				Titanium oxide (TiO ₂)	13463-67-7	1	0.00004	
				Limestone	1317-65-3	25	0.00102	
		Wire Copper amounts in cable harnesses	0.0020832	Copper	7440-50-8	100	0.00354	
		Wire Lacquers	0.0000868	Polyurethane	9009-54-5	100	0.00015	
9	Capacitor	Ceramic element	0.01511	Barium oxide	1304-28-5	60	0.01541	0.04055

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		Outer electrode	0.00213	Titanium dioxide	13463-67-7	30	-		
				Mic	-	10	-		
			0.00029	Copper	7440-50-8	100	0.00362		
				Glass Di boron trioxide	1303-86-2	20	0.00010		
				Silicon dioxide	7631-86-9	80	-		
			Nickel Plating	0.00011	Nickel plating	7440-02-0	100		0.00019
			Inner electrode	0.00310	Nickel	7440-02-0	100		0.00527
Tin Plating	0.00312	Tin plating	7440-31-5	100	0.00530				
10	Polyphenylene Sulfide	Fiber glass	0.00350	Carbon black	1333-86-4	58.5	0.00348	0.00595	
				Glass Fiber	65997-17-3	40	0.00238		
				Polyphenylene	26125-40-6	0.5	0.00003		
11	Shunt	Copper Alloy	32.6550	Copper	7440-50-8	99.95	55.47625	65.02152	
				Oxygen	7782-44-7	0.05	0.02775		
		Resistance Material	5.5910	Copper	7440-50-8	86	8.17264		
				Manganese	7439-96-5	12	1.14037		
				Nickel	7440-02-0	2	0.19006		
Plating	0.0050	Nickel	7440-02-0	100	0.00850				
12	Top housing	Resin	3.6300	Polyphenylene Sulfide	26125-40-6	59.5	3.67112	10.36993	
				Glass fiber	65997-17-3	40	0.15055		
				Carbon Black	1333-86-4	0.5	0.00026		
13	Bottom housing	Resin	3.154	Polyphenylene Sulfide	26125-40-6	59.5	3.18973	9.01016	
				Glass fiber	65997-17-3	40	0.16908		
				Carbon Black	1333-86-4	0.5	0.02680		
14	Conformal coating	Coating Silica	0.679	Dichlorodimethyl	68611-44-9	97	1.11948	1.18980	

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		Amino Silane	0.021	Aminopropyltriethoxysilane	919-30-2	3	0.03462	
15	Adhesive	Silicone	0.800	Limestone	1317-65-3	90	1.22379	1.35977
				Trimethoxyvinylsilane	2768-02-7	5	0.06799	
				3-(Trimethoxysilyl) propylamine	13822-56-5	4	0.05439	
				Quartz (SiO ₂)	14808-60-7	1	0.01360	
16	PCB	Copper Alloy	5.450	Copper	7440-50-8	100	9.26341	9.27011
		Conformal Coating	0.00015	Epoxy Resin	26265-08-7	45	0.00011	
			0.00350	Glass Fiber	65997-17-3	45	0.00268	
			0.00029	Silicon dioxide	7631-86-9	10	0.00005	
17	Solder Preform	Tin - Silver	0.10420	Silver	7440-22-4	3.5	0.00620	0.17711
				Tin	7440-31-5	96.5	0.17091	
		Total Weight	58.83					

This Document was updated on: 1/30/2023

Important remarks:

1. It is the responsibility of the user to verify they are accessing the latest version.