

# MATERIAL DECLARATION SHEET



Material Number	SSA-2-1000A		
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	0.00003	0.01045
			0.00015	Copper	7440-50-8	100	0.00011	
			0.00022	Tin	7440-31-5	100	0.00016	
		Silver Electrode	0.00048	Silver	7440-22-4	100	0.00036	
			Terminal Electrode	0.00032	Silver	7440-22-4	88	
		Silicon dioxide			60676-86-0	4	0.00001	
		Glass without declarable substances materials			-	8	0.00002	
		Multilayer Ferrite Inductors	0.01279	Copper	7440-50-8	4	0.00038	
				Nickel	7440-02-0	3	0.00029	
				Ferrite	7439-89-6	89	0.00850	
Zinc	7440-66-6			4	0.00038			
2	Electrical Connector 1	Body	0.34	Carbon black	1333-86-4	10	0.02539	0.38997
				Liquid Crystal Polymer	70679-92-4	50	0.12695	
				Further Additives, not to declare	system	10	0.02539	
				Glass Fiber	65997-17-3	30	0.07617	
		Terminals	0.172	Copper	7440-50-8	85	0.10918	
				Zinc	7440-66-6	15	0.01927	

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		Nickel underplating	0.0064	Nickel	7440-02-0	100	0.00478	
		Tin underplating	0.0034	TIN	7440-31-5	100	0.00254	
		Gold Terminals	0.000408	Cobalt	7440-48-4	10	0.00003	
				Nickel	7440-02-0	10	0.00003	
				Gold	7440-57-5	80	0.00024	
3	Electrical Connector 2 (X2)	Body	0.68	Carbon black	1333-86-4	10	0.05078	0.79488
				Liquid Crystal Polymer	70679-92-4	60	0.30468	
				Further Additives, not to declare	system	10	0.05078	
				Glass Fiber	65997-17-3	30	0.15234	
		Terminals	0.364	Copper	7440-50-8	85	0.23105	
				Zinc	7440-66-6	15	0.04077	
		Nickel underplating	0.0128	Nickel	7440-02-0	100	0.00956	
				Tin underplating	0.0068	TIN	7440-31-5	
		Gold Plating	0.000816	Cobalt	7440-48-4	10	0.00006	
				Nickel	7440-02-0	10	0.00006	
Gold	7440-57-5			80	0.00049			
4	Screw (X2)	A2 Stainless-Steel (X 2)	0.508	Carbon	7440-44-0	0.15	0.00057	0.37936
				Manganese	7439-96-5	2	0.00759	
				Phosphorus	7723-14-0	0.2	0.00076	
				Sulfur	7704-34-9	0.15	0.00057	
				Silicon	7440-21-3	0.9	0.00341	
				Chromium	7440-47-3	18	0.06828	
				Nickel	7440-02-0	9	0.03414	
				Iron	7439-89-6	69	0.26176	
				Molybdenum	7439-98-7	0.6	0.00228	
5	Voltage	Gold wire	0.0089340	Gold	7440-57-5	100	0.00667	0.01318

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	Regulator	Die Attach Adhesive	0.0016434	Silver	7440-22-4	79.99993	0.00098	
				Epoxy	85954-11-6	20.00007	0.00025	
		Copper and Its Alloys	0.0054614	Copper	7440-50-8	97.41	0.00397	
				Iron	7439-89-6	2.38	0.00010	
				Phosphorus	7723-14-0	0.083994	0.00000	
				Zinc	7440-66-6	0.126006	0.00001	
		Lead Frame Plating	0.0012400	Nickel	7440-02-0	95.11982	0.00088	
				Gold	7440-57-5	0.780172	0.00001	
				Palladium	7440-05-3	4.1	0.00004	
		Mold Compound	0.0000849	Fused Silica	60676-86-0	85.9999	0.00005	
				Carbon Black	1333-86-4	0.5	0.00000	
				Epoxy	85954-11-6	13.5	0.00001	
		Ceramics / Glass	0.0002850	Silicon	7440-21-3	100	0.00029	
		6	Diodes & Rectifiers	Die Doped Silicon	0.000208	Silicon	7440-21-3	
Lead Frame	0.0024			Iron	7439-89-6	57.65	0.00103	
				Nickel	7440-02-0	41	13.17670	
				Manganese	7439-96-5	0.6	0.00001	
				Chromium	7440-47-3	0.1	0.00000	
				Cobalt	7440-48-4	0.5	0.00001	
				Silicon	7440-21-3	0.15	0.00000	
Lead Frame plating	0.000091			Silver	7440-22-4	100	0.00007	
Wire Bonding	0.000052			Gold	7440-57-5	100	0.00004	
Molding Compound	0.006601			Silicon Dioxide	7631-86-9	83	0.00409	
				Zinc Oxide	1314-13-2	1	0.00005	

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7	Voltage Regulators			Phenol-formaldehyde polymer	9003-35-4	10	0.00049	0.01374
				Boron zinc hydroxide oxide	138265-88-0	5	0.00025	
				Carbon black	1333-86-4	1	0.00005	
		Die Attach Epoxy	0.00086	Silver	7440-22-4	75	0.00048	
				Epoxy resin	Trade secret	25	0.00016	
		Tin Plating	0.000213	Tin	7440-31-5	100	0.00016	
		Bond Wire	0.000023	Gold	7440-57-5	100	0.00002	
		Die Attach Adhesive	0.000287	Silver	7440-22-4	79.99	0.00017	
				Epoxy	85954-11-6	20	0.00004	
		Lead Frame	0.006460	Copper	7440-50-8	97.41	0.00470	
				Iron	7439-89-6	2.38	0.00011	
Phosphorus	7723-14-0			0.08399	0.00000			
Lead Frame Plating	0.000116	Zinc	7440-66-6	0.126	0.00001			
		Nickel	7440-02-0	95.11	0.00008			
		Gold	7440-57-5	0.7801	0.00000			
Mold Compound	0.010895	Palladium	7440-05-3	4.1	0.00000			
		Fused Silica	60676-86-0	85.99	0.00700			
		Carbon Black	1333-86-4	0.5	0.00004			
Ceramics / Glass	0.000623	Epoxy	85954-11-6	13.5	0.00110			
		Doped Silicon	7440-21-3	100	0.00047			
8	Power Transformers	Header filled thermoplastics.	0.05837	Aluminum hydroxide	21645-51-2	40	0.01744	0.07468
				Glass fiber	65997-17-3	30	0.01308	

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		Diallyl phthalate resin	25035-78-3	25	0.01090
		Antimonyoxide (Sb2O3)	1309-64-4	4.5	0.00196
		Carbon black	1333-86-4	0.5	0.00022
	Terminal copper alloys	Copper	7440-50-8	93.45	0.00535
		Tin	7440-31-5	6.05	0.00035
		Phosphorus	7723-14-0	0.35	0.00002
		Zinc	7440-66-6	0.1	0.00001
		Iron	7439-89-6	0.05	0.00000
	Terminal Plating Special metals	Nickel	7440-02-0	34	0.00010
		Tin	7440-31-5	66	0.00020
	Ceramics/glass	Ironoxide (Fe3O4)	1317-61-9	70	0.00763
		Manganesoxide (Mn3O4)	1317-35-7	17	0.00185
		Zincoxide (ZnO)	1314-13-2	13	0.00142
	Wire Copper	Copper	7440-50-8	98.7	0.00265
		Tin	7440-31-5	1.3	0.00003
	Wire Lacquers	Polymer with tetrafluoroethene	26655-00-5	99.91	0.00026
	Solder	Tin	7440-31-5	96	0.00300
		Silver	7440-22-4	4	0.00013
	Core Coating	Paracyclophane	1633-22-3	99	0.00011
		Trade secret	N/A	1	0.00000
	Wire Copper In cable harnesses	Copper	7440-50-8	100	0.00137

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		Wire Lacquers	0.0003309	Polyurethane	9009-54-5	94.4	0.00023		
				Polyamide resin	70024-79-2	5.6	0.00001		
		Wire Copper Alloy	0.0014453	Copper	7440-50-8	100	0.00108		
		Wire Tin Plating	0.0000447	Tin	7440-31-5	100	0.00003		
		Wire Isolation Lacquers	0.00153881		polymer with tetrafluoroethene	26655-00-5	99.58		0.00114
					C.I. Pigment Blue 28	1345-16-0	0.18		0.00000
					Titanium oxide (TiO <sub>2</sub> )	13463-67-7	0.18		0.00000
					C.I. Pigment Green 50	68186-85-6	0.06		0.00000
		Wire Isolation Copper Alloy	0.00093119		Copper	7440-50-8	97.95		0.00068
					Tin	7440-31-5	2.05		0.00001
		Adhesive Sealants	0.00239		Bisphenol A Di glycidyl ether resin	25068-38-6	50		0.00089
					Talc	14807-96-6	14		0.00025
					Crystalline silica	14808-60-7	10		0.00018
					Titanium oxide (TiO <sub>2</sub> )	13463-67-7	1		0.00002
					Limestone	1317-65-3	25		0.00045
Wire Copper amounts in cable harnesses	0.0020832		Copper	7440-50-8	100	0.00156			
Wire Lacquers	0.0000868		Polyurethane	9009-54-5	100	0.00006			
9	Capacitor	Ceramic element	0.01511	Barium oxide	1304-28-5	60	0.00677	0.01782	
				Titanium dioxide	13463-67-7	30	-		
				Mic	-	10	-		
		Outer electrode	0.00213	Copper	7440-50-8	100	0.00159		

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			0.00029	Glass Di boron trioxide	1303-86-2	20	0.00004	
				Silicon dioxide	7631-86-9	80	-	
		Nickel Plating	0.00011	Nickel plating	7440-02-0	100	0.00009	
		Inner electrode	0.00310	Nickel	7440-02-0	100	0.00231	
		Tin Plating	0.00312	Tin plating	7440-31-5	100	0.00233	
10	Polyphenylene Sulfide	Fiber glass	0.00350	Carbon black	1333-86-4	58.5	0.00153	0.00261
				Glass Fiber	65997-17-3	40	0.00105	
				Polyphenylene	26125-40-6	0.5	0.00001	
11	Shunt	Copper Alloy	98.6550	Copper	7440-50-8	99.95	73.63600	81.06551
				Oxygen	7782-44-7	0.05	0.03684	
		Resistance Material	9.8910	Copper	7440-50-8	86	6.35224	
				Manganese	7439-96-5	12	0.88636	
				Nickel	7440-02-0	2	0.14773	
Plating	0.0050	Nickel	7440-02-0	100	0.00373			
12	Top housing	Resin	4.6300	Polyphenylene Sulfide	26125-40-6	59.5	2.05725	5.99733
			3.3700	Glass Fiber	65997-17-3	40	0.11652	
			0.0310	Carbon Black	1333-86-4	0.5	0.00012	
13	Bottom housing	Resin	4.570	Polyphenylene Sulfide	26125-40-6	59.5	2.03059	5.96447
			3.390	Glass Fiber	65997-17-3	40	0.15596	
			0.027	Carbon Black	1333-86-4	0.5	0.01706	
14	Conformal coating	Coating Silica	0.679	Dichlorodimethyl	68611-44-9	97	0.49185	0.52274
		Amino Silane	0.021	Aminopropyltriethoxysilane	919-30-2	3	0.01521	
15	Adhesive	Silicone	0.800	Limestone	1317-65-3	90	0.53768	0.59742

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				Trimethoxyvinylsilane	2768-02-7	5	0.02987	
				3-(Trimethoxysilyl) propylamine	13822-56-5	4	0.02390	
				Quartz (SiO <sub>2</sub> )	14808-60-7	1	0.00597	
16	PCB Multilayer	Copper Alloy	5.450	Copper	7440-50-8	100	4.06991	4.07285
		Conformal Coating	0.00015	Epoxy Resin	26265-08-7	45	0.00005	
			0.00350	Glass Fiber	65997-17-3	45	0.00118	
			0.00029	Silicon dioxide	7631-86-9	10	0.00002	
17	Solder Preform	Tin - Silver	0.10420	Silver	7440-22-4	3.5	0.00272	0.07781
				Tin	7440-31-5	96.5	0.07509	
		<b>Total Weight</b>	<b>133.91</b>					

**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.