

MATERIAL DECLARATION SHEET



Material Number	SSA-2-500A		
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	0.00005	0.01867
			0.00015	Copper	7440-50-8	100	0.00020	
			0.00022	Tin	7440-31-5	100	0.00029	
		Silver Electrode	0.00048	Silver	7440-22-4	100	0.00064	
			Terminal Electrode	0.00032	Silver	7440-22-4	88	
		Silicon dioxide			60676-86-0	4	0.00002	
		Glass without declarable substances materials			-	8	0.00003	
		Multilayer Ferrite Inductors	0.01279	Copper	7440-50-8	4	0.00068	
				Nickel	7440-02-0	3	0.00051	
				Ferrite	7439-89-6	89	0.01518	
Zinc	7440-66-6			4	0.00068			
2	Electrical Connector 1	Body	0.34	Carbon black	1333-86-4	10	0.04534	0.69634
				Liquid Crystal Polymer	70679-92-4	50	0.22669	
				Further Additives, not to declare	system	10	0.04534	
				Glass Fiber	65997-17-3	30	0.13601	
		Terminals	0.172	Copper	7440-50-8	85	0.19495	
				Zinc	7440-66-6	15	0.03440	

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		Nickel underplating	0.0064	Nickel	7440-02-0	100	0.00853	
		Tin underplating	0.0034	TIN	7440-31-5	100	0.00453	
		Gold Terminals	0.000408	Cobalt	7440-48-4	10	0.00005	
				Nickel	7440-02-0	10	0.00005	
				Gold	7440-57-5	80	0.00044	
3	Electrical Connector 2 (X2)	Body	0.68	Carbon black	1333-86-4	10	0.09067	1.41934
				Liquid Crystal Polymer	70679-92-4	60	0.54405	
				Further Additives, not to declare	system	10	0.09067	
				Glass Fiber	65997-17-3	30	0.27202	
		Terminals	0.364	Copper	7440-50-8	85	0.41257	
				Zinc	7440-66-6	15	0.07281	
		Nickel underplating	0.0128	Nickel	7440-02-0	100	0.01707	
				Tin underplating	0.0068	TIN	7440-31-5	
		Gold Plating	0.000816	Cobalt	7440-48-4	10	0.00011	
				Nickel	7440-02-0	10	0.00011	
Gold	7440-57-5			80	0.00087			
4	Screw	A2 Stainless-Steel (X 2)	0.508	Carbon	7440-44-0	0.15	0.00102	0.67739
				Manganese	7439-96-5	2	0.01355	
				Phosphorus	7723-14-0	0.2	0.00135	
				Sulfur	7704-34-9	0.15	0.00102	
				Silicon	7440-21-3	0.9	0.00610	
				Chromium	7440-47-3	18	0.12193	
				Nickel	7440-02-0	9	0.06097	
				Iron	7439-89-6	69	0.46740	
				Molybdenum	7439-98-7	0.6	0.00406	
5	Voltage	Gold wire	0.0089340	Gold	7440-57-5	100	0.01191	0.02353

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	Regulator	Die Attach Adhesive	0.0016434	Silver	7440-22-4	79.99993	0.00175	
				Epoxy	85954-11-6	20.00007	0.00044	
		Copper and Its Alloys	0.0054614	Copper	7440-50-8	97.41	0.00709	
				Iron	7439-89-6	2.38	0.00017	
				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	0.00157	
				Gold	7440-57-5	0.780172	0.00001	
				Palladium	7440-05-3	4.1	0.00007	
		Mold Compound	0.0000849	Fused Silica	60676-86-0	85.9999	0.00010	
				Carbon Black	1333-86-4	0.5	0.00000	
				Epoxy	85954-11-6	13.5	0.00002	
		Ceramics / Glass	0.0002850	Silicon	7440-21-3	100	0.00029	
6	Diodes & Rectifiers	Die Doped Silicon	0.000208	Silicon	7440-21-3	100	0.00028	0.01390
		Lead Frame	0.0024	Iron	7439-89-6	57.65	0.00184	
				Nickel	7440-02-0	41	7.37937	
				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	0.00000	
		Lead Frame plating	0.000091	Silver	7440-22-4	100	0.00012	
		Wire Bonding	0.000052	Gold	7440-57-5	100	0.00007	
		Molding Compound	0.006601	Silicon Dioxide	7631-86-9	83	0.00731	
Zinc Oxide	1314-13-2			1	0.00009			

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				Phenol-formaldehyde polymer	9003-35-4	10	0.00088				
				Boron zinc hydroxide oxide	138265-88-0	5	0.00044				
				Carbon black	1333-86-4	1	0.00009				
		Die Attach Epoxy	0.00086	Silver	7440-22-4	75	0.00086				
				Epoxy resin	Trade secret	25	0.00029				
		Tin Plating	0.000213	Tin	7440-31-5	100	0.00028				
		7	Voltage Regulators	Bond Wire	0.000023	Gold	7440-57-5		100	0.00003	0.02454
				Die Attach Adhesive	0.000287	Silver	7440-22-4		79.99	0.00031	
						Epoxy	85954-11-6		20	0.00008	
				Lead Frame	0.006460	Copper	7440-50-8		97.41	0.00839	
Iron	7439-89-6					2.38	0.00021				
Phosphorus	7723-14-0					0.08399	0.00001				
Lead Frame Plating	0.000116			Zinc	7440-66-6	0.126	0.00001				
				Nickel	7440-02-0	95.11	0.00015				
				Gold	7440-57-5	0.7801	0.00000				
Mold Compound	0.010895			Palladium	7440-05-3	4.1	0.00001				
		Fused Silica	60676-86-0	85.99	0.01249						
		Carbon Black	1333-86-4	0.5	0.00007						
Ceramics / Glass	0.000623	Epoxy	85954-11-6	13.5	0.00196						
8	Power Transformers	Header filled thermoplastics.	0.05837	Doped Silicon	7440-21-3	100	0.00083	0.13334			
				Aluminum hydroxide	21645-51-2	40	0.03113				
				Glass fiber	65997-17-3	30	0.02335				

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		Diallyl phthalate resin	25035-78-3	25	0.01946
		Antimonyoxide (Sb2O3)	1309-64-4	4.5	0.00350
		Carbon black	1333-86-4	0.5	0.00039
	Terminal copper alloys	Copper	7440-50-8	93.45	0.00956
	0.00767	Tin	7440-31-5	6.05	0.00062
		Phosphorus	7723-14-0	0.35	0.00004
		Zinc	7440-66-6	0.1	0.00001
		Iron	7439-89-6	0.05	0.00001
	Terminal Plating Special metals	Nickel	7440-02-0	34	0.00018
	0.0004	Tin	7440-31-5	66	0.00035
	Ceramics/glass	Ironoxide (Fe3O4)	1317-61-9	70	0.01362
	0.01459	Manganesoxide (Mn3O4)	1317-35-7	17	0.00331
		Zincoxide (ZnO)	1314-13-2	13	0.00253
	Wire Copper	Copper	7440-50-8	98.7	0.00473
	0.003593	Tin	7440-31-5	1.3	0.00006
	Wire Lacquers	Polymer with tetrafluoroethene	26655-00-5	99.91	0.00046
	0.0003460				
	Solder	Tin	7440-31-5	96	0.00536
	0.0041900	Silver	7440-22-4	4	0.00022
	Core Coating	Paracyclophane	1633-22-3	99	0.00020
	0.0001500	Trade secret	N/A	1	0.00000
	Wire Copper In cable harnesses	Copper	7440-50-8	100	0.00245
	0.0018391				
	Wire Lacquers	Polyurethane	9009-54-5	94.4	0.00042
	0.0003309				

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				Polyamide resin	70024-79-2	5.6	0.00002	
		Wire Copper Alloy	0.0014453	Copper	7440-50-8	100	0.00193	
		Wire Tin Plating	0.0000447	Tin	7440-31-5	100	0.00006	
		Wire Isolation Lacquers	0.00153881	polymer with tetrafluoroethene	26655-00-5	99.58	0.00204	
				C.I. Pigment Blue 28	1345-16-0	0.18	0.00000	
				Titanium oxide (TiO ₂)	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	0.00122	
				Tin	7440-31-5	2.05	0.00003	
		Adhesive Sealants	0.00239	Bisphenol A Di glycidyl ether resin	25068-38-6	50	0.00159	
				Talc	14807-96-6	14	0.00045	
				Crystalline silica	14808-60-7	10	0.00032	
				Titanium oxide (TiO ₂)	13463-67-7	1	0.00003	
				Limestone	1317-65-3	25	0.00080	
		Wire Copper amounts in cable harnesses	0.0020832	Copper	7440-50-8	100	0.00278	
		Wire Lacquers	0.0000868	Polyurethane	9009-54-5	100	0.00012	
9	Capacitor	Ceramic element	0.01511	Barium oxide	1304-28-5	60	0.01209	0.03181
				Titanium dioxide	13463-67-7	30	-	
				Mic	-	10	-	
		Outer electrode	0.00213	Copper	7440-50-8	100	0.00284	
			0.00029	Glass Di boron trioxide	1303-86-2	20	0.00008	
				Silicon dioxide	7631-86-9	80	-	

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		Nickel Plating	0.00011	Nickel plating	7440-02-0	100	0.00015	
		Inner electrode	0.00310	Nickel	7440-02-0	100	0.00413	
		Tin Plating	0.00312	Tin plating	7440-31-5	100	0.00416	
10	Polyphenylene Sulfide	Fiber glass	0.00350	Carbon black	1333-86-4	58.5	0.00273	0.00467
				Glass Fiber	65997-17-3	40	0.00187	
				Polyphenylene	26125-40-6	0.5	0.00002	
11	Shunt	Copper Alloy	47.6550	Copper	7440-50-8	99.95	63.51365	72.34551
				Oxygen	7782-44-7	0.05	0.03177	
		Resistance Material	6.5910	Copper	7440-50-8	86	7.55833	
				Manganese	7439-96-5	12	1.05465	
				Nickel	7440-02-0	2	0.17578	
Plating	0.0050	Nickel	7440-02-0	100	0.00667			
12	Top housing	Resin	3.6300	Polyphenylene Sulfide	26125-40-6	59.5	2.88005	8.13536
				Glass fiber	65997-17-3	40	0.11811	
				Carbon Black	1333-86-4	0.5	0.00021	
13	Bottom housing	Resin	3.154	Polyphenylene Sulfide	26125-40-6	59.5	2.50239	7.06860
				Glass Fiber	65997-17-3	40	0.13265	
				Carbon Black	1333-86-4	0.5	0.02103	
14	Conformal coating	Coating Silica	0.679	Dichlorodimethyl	68611-44-9	97	0.87825	0.93341
		Amino Silane	0.021	Aminopropyltriethoxysilane	919-30-2	3	0.02716	
15	Adhesive	Silicone	0.800	Limestone	1317-65-3	90	0.96008	1.06676
				Trimethoxyvinylsilane	2768-02-7	5	0.05334	
				3-(Trimethoxysilyl) propylamine	13822-56-5	4	0.04267	

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				Quartz (SiO ₂)	14808-60-7	1	0.01067	
16	PCB	Copper Alloy	5.450	Copper	7440-50-8	100	7.26729	7.27254
		Conformal Coating	0.00015	Epoxy Resin	26265-08-7	45	0.00009	
			0.00350	Glass Fiber	65997-17-3	45	0.00210	
			0.00029	Silicon dioxide	7631-86-9	10	0.00004	
17	Solder Preform	Tin - Silver	0.10420	Silver	7440-22-4	3.5	0.00486	0.13895
				Tin	7440-31-5	96.5	0.13408	
		Total Weight	74.99					

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Important remarks:

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