

# MATERIAL DECLARATION SHEET



Material number	SSA-2-1000A-AE			
Product Line	Sensor & Controls			
Compliance Date	1/13/2026			
RoHS Compliant	Yes	MSL	N/A	

No.	Construction Element (subpart)	Homogeneous Material	Material weight [g]	Homogeneous Material/	CASRN	Materials Mass %	Material Mass % of total unit wt.	Subpart mass of total wt. (%)
				Substances	if applicable			
1	Ceramic Capacitor 10 $\mu$ F $\pm$ 10%	Ceramic element	0.012	Barium Oxide	1304-28-5	60.00	0.005	0.009
				Titanium Dioxide	13463-67-7	30.00	0.003	
				Miscellaneous	Proprietary	10.00	0.0009	
		Outer Electrode	0.002	Copper	7440-50-8	90.00	0.001	0.001
				Boron Oxide	1303-86-2	2.00	0.00003	
				Silicon Dioxide	7631-86-9	8.00	0.0001	
				Plating Layer I	0.00008	Nickel	7440-02-0	
Inner Electrode	0.003	Nickel	7440-02-0	100.00	0.002	0.002		
Plating Layer II	0.0002	Tin	7440-31-5	100.00	0.0002	0.0002		
2	Ceramic Capacitor 22 $\mu$ F $\pm$ 20% 3X	Ceramic Substrate	0.048	Barium Oxide	1304-28-5	60.00	0.021	0.036
				Titanium Dioxide	13463-67-7	30.00	0.011	
				Miscellaneous	Proprietary	10.00	0.004	
		Outer Electrode	0.009	Copper	7440-50-8	90.00	0.006	0.006
				Boron Oxide	1303-86-2	2.00	0.0001	
				Silicon Dioxide	7631-86-9	8.00	0.0005	
				Plating layer I	0.0003	Nickel	7440-02-0	
Inner Electrode	0.011	Nickel	7440-02-0	100.00	0.008	0.008		
Plating layer II	0.0009	Tin	7440-31-5	100.00	0.0007	0.0007		

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3	Ceramic Capacitor 0.1 $\mu$ F $\pm$ 10% 3X	Ceramic Dielectric	0.044	Barium Titanium Trioxide	12047-27-7	99.04	0.032	0.032
				Miscellaneous	Proprietary	0.96	0.0003	
		Inner Electrode	0.004	Nickel	7440-02-0	100.00	0.003	0.003
		Termination	0.009	Copper	7440-50-8	72.95	0.005	0.006
				Miscellaneous	Proprietary	7.53	0.0005	
				Nickel	7440-02-0	4.79	0.0003	
				Tin	7440-31-5	14.73	0.001	
4	Diode 2X	Mold Compound	0.016	Fused Silica	60676-86-0	79.50	0.009	0.01
				Epoxy Resin	29690-82-2	10.00	0.001	
				Phenolic Resin	9003-35-4	10.00	0.001	
				Carbon Black	1333-86-4	0.50	0.0001	
		Lead Frame	0.005	Silicon	7440-21-3	36.30	0.001	0.003
				Manganese	7439-96-5	50.20	0.002	
				Nickel	7440-02-0	13.50	0.0005	
				Cobalt	7440-48-4	3.00	0.0001	
				Iron	7439-89-6	0.50	0.00002	
				Phosphorus	7723-14-0	3.00	0.0001	
				Carbon	7440-44-0	80.00	0.003	
				Carbon Black	1333-86-4	1.00	0.00003	
		Sulfur	7704-34-9	8.00	0.0003			
		Chromium	7440-47-3	4.50	0.0002			
		Plating 1	0.000005	Copper	7440-50-8	100.00	0.000003	0.000003
		Plating 2	0.000001	Silver	7440-22-4	100.00	0.000001	0.000001
		Terminal	0.0003	Tin	7440-31-5	100.00	0.0002	0.0002
		Chip	0.0001	Silicon	7440-21-3	99.57	0.0001	0.0001
Silicon Dioxide	14808-60-7			0.43	0.0000005			
Chip Metal	0.00001	Gold	7440-57-5	100.00	0.00001	0.00001		
Bond Wire	0.00002	Copper	7440-50-8	100.00	0.00001	0.00001		
Bond Wire Plating 1	0.0000004	Palladium	7440-05-3	100.00	0.0000003	0.0000003		

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		Bond Wire Plating 1	0.0000004	Gold	7440-57-5	100.00	0.0000003	0.0000003
5	Connector	LCP-GF30	0.34	Carbon Black	1333-86-4	0.50	0.001	0.251
				Liquid Crystal Polymer	70679-92-4	68.00	0.170	
				Further Additives	Trade Secret	1.50	0.004	
				Glass Fiber	65997-17-3	30.00	0.075	
		Tin Plating	0.003	Tin	7440-31-5	100.00	0.003	0.003
		Gold Plating	0.0004	Cobalt	7440-48-4	99.50	0.0003	0.0003
				Nickel	7440-02-0	0.25	0.000001	
				Gold	7440-57-5	0.25	0.000001	
		Nickel Plating	0.006	Nickel	7440-02-0	100.00	0.005	0.005
		Cartridge Brass 70% Unplate	0.172	Copper	7440-50-8	70.00	0.089	0.127
Nickel	7440-02-0			30.00	0.038			
6	Fixed Inductor	Ferrite	0.013	Nickel Zinc Iron Oxide Nanopowder 99+%	1309-37-1	100.00	0.009	0.01
		Inner Electrode	0.0005	Silver	7440-22-4	100.00	0.000	0.00
		Terminal Electrode Plating	0.0003	Silver	7440-22-4	100.00	0.0002	0.0002
		Terminal Electrode	0.002	Silver	7440-22-4	88.00	0.001	0.0013
				Silicon Dioxide	60676-86-0	4.00	0.0001	
				Other	Proprietary	8.00	0.0001	
		Electro Plating I	0.0001	Copper	7440-50-8	100.00	0.0001	0.0001
		Electro Plating II	0.00008	Nickel	7440-02-0	100.00	0.0001	0.0001
Electro Plating III	0.0002	Tin	7440-31-5	100.00	0.0002	0.0002		
7	Converters / Transformer	Header	0.488	diallyl phthalate resin	25035-78-3	25.00	0.090	0.360
				Aluminum hydroxide.	21645-51-2	40.00	0.144	
				Antimony oxide(Sb <sub>2</sub> O <sub>3</sub> )	1309-64-4	4.50	0.016	
				Glass fiber	65997-17-3	30.00	0.108	
				Carbon black	1333-86-4	0.50	0.002	

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		Terminal	0.064	Copper	7440-50-8	93.08	0.044	0.047
				Tin	7440-31-5	6.00	0.003	
				Phosphorus	7723-14-0	0.25	0.0001	
				Nickel	7440-02-0	0.20	0.0001	
				Zinc	7440-66-6	0.30	0.0001	
				Iron	7439-89-6	0.10	0.00005	
				Lead	7439-92-1	0.02	0.00001	
				Trade secret	Proprietary	0.05	0.00002	
		Ceramic	0.122	Iron oxide	1317-61-9	70.00	0.063	0.090
				Manganese oxide	1317-35-7	17.00	0.015	
				Zinc oxide	1314-13-2	13.00	0.012	
		Solder	0.035	Silver	7440-22-4	4.00	0.001	0.026
				Tin	7440-31-5	96.00	0.025	
		Coating	0.001	Paracyclophane	1633-22-3	99.00	0.001	0.001
				Trade Secret	Proprietary	1.00	0.00001	
Adhesives, sealants	0.020	Bisphenol A diglycidyl ether resin	25068-38-6	55.00	0.008	0.015		
		Talc	14807-96-6	7.50	0.001			
		Crystalline silica	14808-60-7	1.00	0.0001			
		Titanium oxide	13463-67-7	0.50	0.0001			
		Limestone	1317-65-3	29.00	0.004			
		Additives	Proprietary	7.00	0.001			
Pin Plating I	0.001	Nickel	7440-02-0	99.90	0.001	0.001		
		Trade secret	Proprietary	0.10	0.000001			
Pin Plating II	0.002	Tin	7440-31-5	99.90	0.002	0.002		
		Trade secret	-	0.10	0.000			
Wire I	0.030	Copper	7440-50-8	100.00	0.022	0.022		
Wire Plating I	0.0006	Tin	7440-31-5	100.00	0.0004	0.0004		

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		Wire Insulation	0.020	Propane, 1,1,1,2,2,3,3-Heptafluoro-3-[(Trifluoroethenyl)Oxy]-, Polymer With Tetrafluoroethene	26655-00-5	99.50	0.015	0.015
				Trade secret	Proprietary	0.50	0.0001	
		Wire II	0.046	Copper	7440-50-8	100.00	0.034	0.034
		Wire II Coating	0.005	Polyurethane	9009-54-5	97.23	0.003	0.004
		Polyamide	63428-84-2	2.77	0.0001			
8	IC	Bond Wire	0.0003	Iron	7439-89-6	0.0003	0.000000001	0.0002
				Calcium	7440-70-2	0.0003	0.000000001	
				Yttrium	7440-65-5	0.00066	0.000000001	
				Gold	7440-57-5	99.998	0.00022	
				Silver	7440-22-4	0.00099	0.000000002	
		Die Attach Adhesive	0.0005	Silver	7440-22-4	75.00	0.0003	0.0004
				Epoxy	85954-11-6	25.00	0.0001	
		Die Attach Adhesive 2	0.0005	Silver	7440-22-4	75.00	0.0003	0.0004
				Epoxy	85954-11-6	25.00	0.0001	
		Die Attach Adhesive 3	0.0002	Silver	7440-22-4	75.00	0.0001	0.0002
				Epoxy	85954-11-6	25.00	0.00004	
		Die Attach Adhesive 4	0.0002	Silver	7440-22-4	75.00	0.0001	0.0002
				Epoxy	85954-11-6	25.00	0.00004	
		Lead Frame	0.199	Copper	7440-50-8	97.05	0.142	0.15
				Iron	7439-89-6	2.60	0.004	
				Phosphorus	7723-14-0	0.15	0.0002	
Zinc	7440-66-6			0.20	0.0003			
Lead Frame Plating	0.0007	Nickel	7440-02-0	95.12	0.0005	0.0005		
		Gold	7440-57-5	0.78	0.000004			
		Palladium	7440-05-3	4.10	0.00002			
Mold Compound	0.207	Silica Glass	60676-86-0	89.50	0.137	0.153		
		Carbon Black	1333-86-4	0.50	0.0008			
		Chlorine	7782-50-5	0.002	0.000003			

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				4,4'-Bis(2,3-epoxypropoxy)-3,3',5,5'-tetramethylbiphenyl	85954-11-6	10.00	0.015	
		Semiconductor	0.002	Silicon	7440-21-3	100.00	0.001	0.001
		Semiconductor 2	0.002	Silicon	7440-21-3	100.00	0.001	0.001
		Semiconductor 3	0.001	Silicon	7440-21-3	100.00	0.0006	0.0006
		Semiconductor 4	0.001	Silicon	7440-21-3	100.00	0.0006	0.0006
9	IC	Bond Wire	0.00009	Gold	7440-57-5	100.00	0.0001	0.00006
		Die Attach Adhesive	0.0002	Silver	7440-22-4	80.00	0.0001	0.0001
				4,4'-Bis(2,3-epoxypropoxy)-3,3',5,5'-tetramethylbiphenyl	85954-11-6	20.00	0.00002	
		Lead Frame	0.006	Copper	7440-50-8	97.44	0.004	0.004
				Iron	7439-89-6	2.35	0.0001	
				Phosphorus	7723-14-0	0.08	0.000004	
				Zinc	7440-66-6	0.13	0.000005	
		Lead Frame Plating	0.0000004	Nickel	7440-02-0	95.24	0.0000003	0.0000003
				Gold	7440-57-5	0.75	0.000000002	
				Palladium	7440-05-3	4.01	0.00000001	
Mold Compound	0.009	Silicon Dioxide	60676-86-0	86.00	0.006	0.006		
		Carbon Black	1333-86-4	0.50	0.00003			
		4,4'-Bis(2,3-epoxypropoxy)-3,3',5,5'-tetramethylbiphenyl	85954-11-6	13.50	0.0009			
Semiconductor	0.0005	Silicon	7440-21-3	100.00	0.0004	0.0004		
10	IC	Bond Wire	0.00002	Gold	7440-57-5	100.00	0.00001	0.00001
		Die Attach Adhesive	0.0002	Silver	7440-22-4	75.00	0.0001	0.0002
				Epoxy	85954-11-6	52.00	0.0001	
		Lead Frame	0.005	Copper	7440-50-8	99.28	0.0040	0.004

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				Chromium	7440-47-3	0.25	0.00001	
				Tin	7440-31-5	0.25	0.00001	
				Zinc	7440-66-6	0.22	0.00001	
		Lead Frame Plating	0.0002	Nickel	7440-02-0	95.12	0.0001	0.0001
				Gold	7440-57-5	0.78	0.000001	
				Palladium	7440-05-3	4.10	0.000006	
		Mold Compound	0.011	Silicon	60676-86-0	85.00	0.007	0.008
				Carbon Black	1333-86-4	0.30	0.00002	
				4,4'-Bis(2,3-epoxypropoxy)-3,3',5,5'-tetramethylbiphenyl	85954-11-6	14.70	0.001	
		Semiconductor	0.0009	Silicon	7440-21-3	100.00	0.0006	0.0006
11	PCB	Laminate	6.685	Electronic Grade Woven Glass cloth	65997-17-3	31.00	1.527973405	4.9289
				Copper Foil	7440-50-8	40.00	1.971578587	
				Bromine -base epoxy resin	26265-08-7	18.00	0.887210364	
				Brominated Epoxy Flame retardants	68928-70-1	5.00	0.246447323	
				SiO2 Silicon Dioxide	14808-60-7	6.00	0.295736788	
		Solder Mask	0.014	Formaldehyde polymer with (chloromethyl)oxirane and methylphenol, 4-cyclohexene-1,2-dicarboxylate 2-propenoate	182697-62-7	56.800	0.0059	0.0105
				Barium Sulfate	7727-43-7	29.800	0.0031	
				Silicon Dioxide	14808-60-7	1.400	0.0001	
				Bentonite	1302-78-9	1.400	0.0001	
				(29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32)copper	147-14-8	1.400	0.0001	
				Pigment yellow	5102-83-0	0.700	0.0001	
				Silicone oil	63148-62-9	1.400	0.0001	
		Dipentaerythritol Hexaacrylate	29570-58-9	7.100	0.0007			
		Metal	0.355	Copper	7440-50-8	99.98	0.261667	0.2617
				Phosphorus	7723-14-0	0.03	0.000065	

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		Legend	0.001	Ebecryl 600	71281-65-7	20.00	0.00021	0.001
				Titanium Oxide	1317-80-2	20.00	0.00021	
				Hexamethylene diacrylate	13048-33-4	30.00	0.00031	
				Trimethylolpropane triacrylate	15625-89-5	30.00	0.00031	
		Surface	0.001	Potassium hydroxide	1310-58-3	100.00	0.001	0.001
0.043	Sodium Hypophosphite Monohydrate		10039-56-2	100.00	0.0314	0.0314		
12	Solder Preform x4	Solder	0.104	Tin	7440-31-5	96.50	0.074	0.077
				Silver	7440-22-4	3.50	0.003	
13	Adhesive	Silicone	0.800	Limestone	1317-65-3	90.00	0.531	0.590
				Trimethoxyvinylsilane	2768-02-7	5.00	0.029	
				3-(Trimethoxysilyl) Propylamine	13822-56-5	4.00	0.024	
				Quartz (SiO <sub>2</sub> )	14808-60-7	1.00	0.006	
14	Conformal coating	Coating Silica	0.7000	Dichlorodimethyl	68611-44-9	97.00	0.501	0.516
				Aminopropyltriethoxysilane	919-30-2	3.00	0.015	
15	Screw	Stainless Steel 304	0.257	Carbon	7440-44-0	0.08	0.0002	0.189
				Manganese	7439-96-5	2.00	0.004	
				Phosphorus	7723-14-0	0.05	0.0001	
				Sulfur	7704-34-9	0.03	0.0001	
				Silicon	7440-21-3	0.75	0.001	
				Chromium	7440-47-3	18.00	0.034	
				Nickel	7440-02-0	8.00	0.015	
				Iron	7439-89-6	71.10	0.134	
16	Top Housing	Resin	7.800	Polyphenylene Sulfide	26125-40-6	59.50	3.422	5.751
				Glass Fiber	65997-17-3	40.00	2.300	
				Carbon Black	1333-86-4	0.50	0.029	
17	Bottom Housing	Resin	6.800	Polyphenylene Sulfide	26125-40-6	59.50	2.983	5.013
				Glass Fiber	65997-17-3	40.00	2.005	
				Carbon Black	1333-86-4	0.50	0.025	
18	Shunt	Manganin	9.891	Copper	7440-50-8	86.00	6.271	7.292

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				Manganese	7439-96-5	12.00	0.875	
				Nickel	7440-02-0	2.00	0.146	
		Plating	0.005	Nickel	7440-02-0	100.00	0.004	0.004
		Copper Alloy	98.655	Copper	7440-50-8	99.95	72.699	72.736
				Oxygen	7782-44-7	0.05	0.036	
19	Silicone	Part A	0.770	Dimethyl Silicone Resin	63148-62-9	44.03	0.250	0.568
				3-Aminopropyltrimethoxysilane	13822-56-5	5.25	0.030	
				Hexamethyldisiloxane	107-46-0	2.40	0.014	
				Quartz	14808-60-7	35.03	0.199	
				Silicon Dioxide	7631-86-9	13.29	0.075	
20	Silicone	Part B	0.770	Dimethyl Silicone Resin	63148-62-9	47.5	0.270	0.568
				Quartz	14808-60-7	35.6	0.202	
				Silicon Dioxide	7631-86-9	16.9	0.096	
21	Solder Paste	Solder	0.003	Tin	7440-31-5	93.50	0.0021	0.002
				Silver	7440-22-4	5.50	0.0001	
				Misc, not to declare	Proprietary	1.00	0.00002	
22	Solder Wire	Lead Free Solder	0.02	Tin	7440-31-5	88.00	0.013	0.015
				Silver	7440-22-4	7.00	0.001	
				Copper	7440-50-8	5.00	0.0007	
		<b>Total Weight</b>	<b>135.63</b>					

This Document was updated on: **02/18/2026**

## Important remarks:

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