

MATERIAL DECLARATION SHEET



Material number	SSA-2-500A-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 μ F \pm 10%	Ceramic element	0.012	Barium Oxide	1304-28-5	60.00	0.009	0.016
				Titanium Dioxide	13463-67-7	30.00	0.005	
				Miscellaneous	Proprietary	10.00	0.0016	
		Outer Electrode	0.002	Copper	7440-50-8	90.00	0.002	0.003
				Boron Oxide	1303-86-2	2.00	0.00005	
				Silicon Dioxide	7631-86-9	8.00	0.0002	
				Plating Layer I	0.00008	Nickel	7440-02-0	
Inner Electrode	0.003	Nickel	7440-02-0	100.00	0.003	0.003		
Plating Layer II	0.0002	Tin	7440-31-5	100.00	0.0003	0.0003		
2	Ceramic Capacitor 22 μ F \pm 20% 3X	Ceramic Substrate	0.048	Barium Oxide	1304-28-5	60.00	0.038	0.064
				Titanium Dioxide	13463-67-7	30.00	0.019	
				Miscellaneous	Proprietary	10.00	0.006	
		Outer Electrode	0.009	Copper	7440-50-8	90.00	0.010	0.011
				Boron Oxide	1303-86-2	2.00	0.0002	
				Silicon Dioxide	7631-86-9	8.00	0.0009	
				Plating layer I	0.0003	Nickel	7440-02-0	
Inner Electrode	0.011	Nickel	7440-02-0	100.00	0.014	0.014		
Plating layer II	0.0009	Tin	7440-31-5	100.00	0.0012	0.0012		

MATERIAL DECLARATION SHEET



3	Ceramic Capacitor 0.1 μ F \pm 10% 3X	Ceramic Dielectric	0.044	Barium Titanium Trioxide	12047-27-7	99.04	0.057	0.058
				Miscellaneous	Proprietary	0.96	0.0006	
		Inner Electrode	0.004	Nickel	7440-02-0	100.00	0.006	0.006
		Termination	0.009	Copper	7440-50-8	72.95	0.008	0.012
				Miscellaneous	Proprietary	7.53	0.0009	
				Nickel	7440-02-0	4.79	0.0006	
		Tin	7440-31-5	14.73	0.002			
4	Diodo 2X	Mold Compound	0.016	Fused Silica	60676-86-0	79.50	0.017	0.02
				Epoxy Resin	29690-82-2	10.00	0.002	
				Phenolic Resin	9003-35-4	10.00	0.002	
				Carbon Black	1333-86-4	0.50	0.0001	
		Lead Frame	0.005	Silicon	7440-21-3	36.30	0.002	0.006
				Manganese	7439-96-5	50.20	0.003	
				Nickel	7440-02-0	13.50	0.0008	
				Cobalt	7440-48-4	3.00	0.0002	
				Iron	7439-89-6	0.50	0.00003	
				Phosphorus	7723-14-0	3.00	0.0002	
				Carbon	7440-44-0	80.00	0.005	
				Carbon Black	1333-86-4	1.00	0.00006	
				Sulfur	7704-34-9	8.00	0.0005	
		Chromium	7440-47-3	4.50	0.0003			
		Plating 1	0.000005	Copper	7440-50-8	100.00	0.000006	0.000006
		Plating 2	0.000001	Silver	7440-22-4	100.00	0.000001	0.000001
		Terminal	0.0003	Tin	7440-31-5	100.00	0.0004	0.0004
		Chip	0.0001	Silicon	7440-21-3	99.57	0.0002	0.0002
				Silicon Dioxide	14808-60-7	0.43	0.000008	
Chip Metal	0.00001	Gold	7440-57-5	100.00	0.00002	0.00002		
Bond Wire	0.00002	Copper	7440-50-8	100.00	0.00002	0.00002		
Bond Wire Plating 1	0.0000004	Palladium	7440-05-3	100.00	0.0000005	0.0000005		

MATERIAL DECLARATION SHEET



		Bond Wire Plating 1	0.0000004	Gold	7440-57-5	100.00	0.0000005	0.0000005
5	Connector	LCP-GF30	0.34	Carbon Black	1333-86-4	0.50	0.002	0.451
				Liquid Crystal Polymer	70679-92-4	68.00	0.307	
				Further Additives	Trade Secret	1.50	0.007	
				Glass Fiber	65997-17-3	30.00	0.135	
		Tin Plating	0.003	Tin	7440-31-5	100.00	0.005	0.005
		Gold Plating	0.0004	Cobalt	7440-48-4	99.50	0.0005	0.0005
				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	0.008	0.008
		Cartridge Brass 70% Unplate	0.172	Copper	7440-50-8	70.00	0.160	0.228
Nickel	7440-02-0			30.00	0.068			
6	Fixed Inductor	Ferrite	0.013	Nickel Zinc Iron Oxide Nanopowder 99+%	1309-37-1	100.00	0.017	0.02
		Inner Electrode	0.0005	Silver	7440-22-4	100.00	0.001	0.00
		Terminal Electrode Plating	0.0003	Silver	7440-22-4	100.00	0.0004	0.0004
		Terminal Electrode	0.002	Silver	7440-22-4	88.00	0.002	0.0023
				Silicon Dioxide	60676-86-0	4.00	0.0001	
				Other	Proprietary	8.00	0.0002	
		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	0.0003	0.0003		
7	Converters / Transformer	Header	0.488	diallyl phthalate resin	25035-78-3	25.00	0.162	0.647
				Aluminum hydroxide.	21645-51-2	40.00	0.259	
				Antimony oxide(Sb ₂ O ₃)	1309-64-4	4.50	0.029	
				Glass fiber	65997-17-3	30.00	0.194	
				Carbon black	1333-86-4	0.50	0.003	

MATERIAL DECLARATION SHEET



		Terminal	0.064	Copper	7440-50-8	93.08	0.079	0.085
				Tin	7440-31-5	6.00	0.005	
				Phosphorus	7723-14-0	0.25	0.0002	
				Nickel	7440-02-0	0.20	0.0002	
				Zinc	7440-66-6	0.30	0.0003	
				Iron	7439-89-6	0.10	0.00008	
				Lead	7439-92-1	0.02	0.00002	
				Trade secret	Proprietary	0.05	0.00004	
		Ceramic	0.122	Iron oxide	1317-61-9	70.00	0.113	0.162
				Manganese oxide	1317-35-7	17.00	0.027	
				Zinc oxide	1314-13-2	13.00	0.021	
		Solder	0.035	Silver	7440-22-4	4.00	0.002	0.046
				Tin	7440-31-5	96.00	0.045	
		Coating	0.001	Paracyclophane	1633-22-3	99.00	0.002	0.002
				Trade Secret	Proprietary	1.00	0.00002	
		Adhesives, sealants	0.020	Bisphenol A diglycidyl ether resin	25068-38-6	55.00	0.015	0.026
Talc	14807-96-6			7.50	0.002			
Crystalline silica	14808-60-7			1.00	0.0003			
Titanium oxide	13463-67-7			0.50	0.0001			
Limestone	1317-65-3			29.00	0.008			
Additives	Proprietary			7.00	0.002			
Pin Plating I	0.001	Nickel	7440-02-0	99.90	0.002	0.002		
		Trade secret	Proprietary	0.10	0.000002			
Pin Plating II	0.002	Tin	7440-31-5	99.90	0.003	0.003		
		Trade secret	Proprietary	0.10	0.000			
Wire I	0.030	Copper	7440-50-8	100.00	0.039	0.039		
Wire Plating I	0.0006	Tin	7440-31-5	100.00	0.0008	0.0008		

MATERIAL DECLARATION SHEET



		Wire Insulation	0.020	Propane, 1,1,1,2,2,3,3-Heptafluoro-3-[(Trifluoroethenyl)Oxy]-, Polymer With Tetrafluoroethene	26655-00-5	99.50	0.026	0.026
				Trade secret	Proprietary	0.50	0.0001	
		Wire II	0.046	Copper	7440-50-8	100.00	0.061	0.061
		Wire II Coating	0.005	Polyurethane	9009-54-5	97.23	0.006	0.006
		Polyamide	63428-84-2	2.77	0.0002			
8	IC	Bond Wire	0.0003	Iron	7439-89-6	0.0003	0.000000001	0.0004
				Calcium	7440-70-2	0.0003	0.000000001	
				Yttrium	7440-65-5	0.00066	0.000000003	
				Gold	7440-57-5	99.998	0.00039	
				Silver	7440-22-4	0.00099	0.000000004	
		Die Attach Adhesive	0.0005	Silver	7440-22-4	75.00	0.0005	0.0007
				Epoxy	85954-11-6	25.00	0.0002	
		Die Attach Adhesive 2	0.0005	Silver	7440-22-4	75.00	0.0005	0.0007
				Epoxy	85954-11-6	25.00	0.0002	
		Die Attach Adhesive 3	0.0002	Silver	7440-22-4	75.00	0.0002	0.0003
				Epoxy	85954-11-6	25.00	0.00007	
		Die Attach Adhesive 4	0.0002	Silver	7440-22-4	75.00	0.0002	0.0003
				Epoxy	85954-11-6	25.00	0.00007	
		Lead Frame	0.199	Copper	7440-50-8	97.05	0.255	0.26
				Iron	7439-89-6	2.60	0.007	
				Phosphorus	7723-14-0	0.15	0.0004	
				Zinc	7440-66-6	0.20	0.0005	
		Lead Frame Plating	0.0007	Nickel	7440-02-0	95.12	0.0009	0.0009
				Gold	7440-57-5	0.78	0.000007	
				Palladium	7440-05-3	4.10	0.00004	
Mold Compound	0.207	Silica Glass	60676-86-0	89.50	0.245	0.274		
		Carbon Black	1333-86-4	0.50	0.0014			
		Chlorine	7782-50-5	0.002	0.000005			

MATERIAL DECLARATION SHEET



				4,4'-Bis(2,3-epoxypropoxy)-3,3',5,5'-tetramethylbiphenyl	85954-11-6	10.00	0.027		
		Semiconductor	0.002	Silicon	7440-21-3	100.00	0.003	0.003	
		Semiconductor 2	0.002	Silicon	7440-21-3	100.00	0.002	0.002	
		Semiconductor 3	0.001	Silicon	7440-21-3	100.00	0.0010	0.0010	
		Semiconductor 4	0.001	Silicon	7440-21-3	100.00	0.0010	0.0010	
9	IC	Bond Wire	0.00009	Gold	7440-57-5	100.00	0.0001	0.00011	
		Die Attach Adhesive	0.0002	Silver	7440-22-4	80.00	0.0002	0.0002	
				4,4'-Bis(2,3-epoxypropoxy)-3,3',5,5'-tetramethylbiphenyl	85954-11-6	20.00	0.00004		
		Lead Frame	0.006	Copper		7440-50-8	97.44	0.007	0.008
				Iron		7439-89-6	2.35	0.0002	
				Phosphorus		7723-14-0	0.08	0.000006	
				Zinc		7440-66-6	0.13	0.000010	
		Lead Frame Plating	0.0000004	Nickel		7440-02-0	95.24	0.0000005	0.0000005
				Gold		7440-57-5	0.75	0.00000004	
				Palladium		7440-05-3	4.01	0.00000002	
Mold Compound	0.009	Silicon Dioxide		60676-86-0	86.00	0.010	0.012		
		Carbon Black		1333-86-4	0.50	0.00006			
		4,4'-Bis(2,3-epoxypropoxy)-3,3',5,5'-tetramethylbiphenyl	85954-11-6	13.50	0.0016				
Semiconductor	0.0005	Silicon		7440-21-3	100.00	0.0006	0.0006		
10	IC	Bond Wire	0.00002	Gold	7440-57-5	100.00	0.00002	0.00002	
		Die Attach Adhesive	0.0002	Silver	7440-22-4	75.00	0.0002	0.0003	
				Epoxy	85954-11-6	52.00	0.0002		
		Lead Frame	0.005	Copper	7440-50-8	99.28	0.0072	0.007	

MATERIAL DECLARATION SHEET



				Chromium	7440-47-3	0.25	0.00002	
				Tin	7440-31-5	0.25	0.00002	
				Zinc	7440-66-6	0.22	0.00002	
		Lead Frame Plating	0.0002	Nickel	7440-02-0	95.12	0.0002	0.0003
				Gold	7440-57-5	0.78	0.000002	
				Palladium	7440-05-3	4.10	0.000011	
		Mold Compound	0.011	Silicon	60676-86-0	85.00	0.013	0.015
				Carbon Black	1333-86-4	0.30	0.00004	
				4,4'-Bis(2,3-epoxypropoxy)-3,3',5,5'-tetramethylbiphenyl	85954-11-6	14.70	0.002	
		Semiconductor	0.0009	Silicon	7440-21-3	100.00	0.0012	0.0012
11	PCB	Laminate	4.613	Electronic Grade Woven Glass cloth	65997-17-3	31.00	1.896	6.116
				Copper Foil	7440-50-8	40.00	2.447	
				Bromine -base epoxy resin	26265-08-7	18.00	1.101	
				Brominated Epoxy Flame retardants	68928-70-1	5.00	0.306	
				SiO2 Silicon Dioxide	14808-60-7	6.00	0.367	
		Solder Mask	0.010	Formaldehyde polymer with (chloromethyl)oxirane and methylphenol, 4-cyclohexene-1,2-dicarboxylate 2-propenoate	182697-62-7	56.800	0.007	0.013
				Barium Sulfate	7727-43-7	29.800	0.004	
				Silicon Dioxide	14808-60-7	1.400	0.0002	
				Bentonite	1302-78-9	1.400	0.0002	
				(29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32)copper	147-14-8	1.400	0.0002	
				Pigment yellow	5102-83-0	0.700	0.0001	
				Silicone oil	63148-62-9	1.400	0.0002	
				Dipentaerythritol Hexaacrylate	29570-58-9	7.100	0.001	
		Metal	0.245	Copper	7440-50-8	99.98	0.325	0.325
				Phosphorus	7723-14-0	0.03	0.000	

MATERIAL DECLARATION SHEET



		Legend	0.001	Ebecryl 600	71281-65-7	20.00	0.0003	0.001
				Titanium Oxide	1317-80-2	20.00	0.0003	
				Hexamethylene diacrylate	13048-33-4	30.00	0.0004	
				Trimethylolpropane triacrylate	15625-89-5	30.00	0.0004	
		Surface	0.001	Potassium hydroxide	1310-58-3	100.00	0.0013	0.001
0.019	Sodium Hypophosphite Monohydrate		10039-56-2	100.00	0.026	0.026		
12	Solder Preform x2	Solder	0.052	Tin	7440-31-5	96.50	0.067	0.069
				Silver	7440-22-4	3.50	0.002	
13	Adhesive	Silicone	0.800	Limestone	1317-65-3	90.00	0.955	1.061
				Trimethoxyvinylsilane	2768-02-7	5.00	0.053	
				3-(Trimethoxysilyl) Propylamine	13822-56-5	4.00	0.042	
				Quartz (SiO ₂)	14808-60-7	1.00	0.011	
14	Conformal coating	Coating Silica	0.700	Dichlorodimethyl	68611-44-9	97.00	0.900	0.928
				Aminopropyltriethoxysilane	919-30-2	3.00	0.028	
15	Screw	Stainless Steel 304	0.257	Carbon	7440-44-0	0.08	0.0003	0.340
				Manganese	7439-96-5	2.00	0.007	
				Phosphorus	7723-14-0	0.05	0.0002	
				Sulfur	7704-34-9	0.03	0.0001	
				Silicon	7440-21-3	0.75	0.003	
				Chromium	7440-47-3	18.00	0.061	
				Nickel	7440-02-0	8.00	0.027	
				Iron	7439-89-6	71.10	0.242	
16	Top Housing	Resin	6.100	Polyphenylene Sulfide	26125-40-6	59.50	4.812	8.088
				Glass Fiber	65997-17-3	40.00	3.235	
				Carbon Black	1333-86-4	0.50	0.040	
17	Bottom Housing	Resin	5.000	Polyphenylene Sulfide	26125-40-6	59.50	3.944	6.629
				Glass Fiber	65997-17-3	40.00	2.652	
				Carbon Black	1333-86-4	0.50	0.033	
18	Shunt	Manganin	4.948	Copper	7440-50-8	86.00	5.642	6.560

MATERIAL DECLARATION SHEET



				Manganese	7439-96-5	12.00	0.787	
				Nickel	7440-02-0	2.00	0.131	
		Plating	0.005	Nickel	7440-02-0	100.00	0.007	0.007
		Copper Alloy	49.348	Copper	7440-50-8	99.95	65.397	65.429
				Oxygen	7782-44-7	0.05	0.033	
19	Silicone	Part A	0.670	Dimethyl Silicone Resin	63148-62-9	44.03	0.391	0.888
				3-Aminopropyltrimethoxysilane	13822-56-5	5.25	0.047	
				Hexamethyldisiloxane	107-46-0	2.40	0.021	
				Quartz	14808-60-7	35.03	0.311	
				Silicon Dioxide	7631-86-9	13.29	0.118	
20	Silicone	Part B	0.670	Dimethyl Silicone Resin	63148-62-9	47.5	0.422	0.888
				Quartz	14808-60-7	35.6	0.316	
				Silicon Dioxide	7631-86-9	16.9	0.150	
21	Solder Paste	Solder	0.003	Tin	7440-31-5	93.50	0.0037	0.004
				Silver	7440-22-4	5.50	0.0002	
				Misc, not to declare	Proprietary	1.00	0.00004	
22	Solder Wire	Lead Free Solder	0.020	Tin	7440-31-5	88.00	0.023	0.027
				Silver	7440-22-4	7.00	0.002	
				Copper	7440-50-8	5.00	0.0013	
		Total Weight	75.42					

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.
2. "Proprietary" in the substance name and / or in CAS number means that sub-supplier did not provide the information. Bourns' declaration of compliance with REACH and/or RoHS is based on declarations received from such sub-suppliers.
3. "Proprietary" in the substance name and / or in CAS number also means that Bourns is unable to determine presence or absence of intentionally added PFAS in such substance unless sub-supplier provided Bourns with PFAS declaration. See Bourns' PFAS Declaration which lists Bourns parts known to have intentionally added PFAS. https://www.bourns.com/docs/RoHS-Content/Bourns_PFAS_Declaration.pdf