

MATERIAL DECLARATION SHEET



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|-----------------|--------------------|-----|-----|
| Material Number | SSA-2-250A | | |
| 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 | 0.02295 |
| | | | 0.00015 | Copper | 7440-50-8 | 100 | 0.00025 | |
| | | | 0.00022 | Tin | 7440-31-5 | 100 | 0.00036 | |
| | | Silver Electrode | 0.00048 | Silver | 7440-22-4 | 100 | 0.00079 | |
| | | | 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 | 0.00084 | |
| | | | | Nickel | 7440-02-0 | 3 | 0.00063 | |
| | | | | Ferrite | 7439-89-6 | 89 | 0.01866 | |
| Zinc | 7440-66-6 | | | 4 | 0.00084 | | | |
| 2 | Electrical Connector 1 | Body | 0.34 | Carbon black | 1333-86-4 | 10 | 0.05574 | 0.85617 |
| | | | | Liquid Crystal Polymer | 70679-92-4 | 50 | 0.27872 | |
| | | | | Further Additives, not to declare | system | 10 | 0.05574 | |
| | | | | Glass Fiber | 65997-17-3 | 30 | 0.16723 | |
| | | Terminals | 0.172 | Copper | 7440-50-8 | 85 | 0.23970 | |

MATERIAL DECLARATION SHEET



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| | | | | Zinc | 7440-66-6 | 15 | 0.04230 | |
| | | Nickel underplating | 0.0064 | Nickel | 7440-02-0 | 100 | 0.01049 | |
| | | Tin underplating | 0.0034 | TIN | 7440-31-5 | 100 | 0.00557 | |
| | | Gold Terminals | 0.000408 | Cobalt | 7440-48-4 | 10 | 0.00007 | |
| | | | | Nickel | 7440-02-0 | 10 | 0.00007 | |
| | | | | Gold | 7440-57-5 | 80 | 0.00054 | |
| 3 | Electrical Connector 2 (X2) | Body | 0.68 | Carbon black | 1333-86-4 | 10 | 0.11149 | 1.75628 |
| | | | | Liquid Crystal Polymer | 70679-92-4 | 60 | 0.66892 | |
| | | | | Further Additives, not to declare | system | 10 | 0.11149 | |
| | | | | Glass Fiber | 65997-17-3 | 30 | 0.33446 | |
| | | Terminals | 0.364 | Copper | 7440-50-8 | 85 | 0.50727 | |
| | | | | Zinc | 7440-66-6 | 15 | 0.08952 | |
| | | Nickel underplating | 0.0128 | Nickel | 7440-02-0 | 100 | 0.02099 | |
| | | | | Tin underplating | 0.0068 | TIN | 7440-31-5 | |
| | | Gold Plating | 0.000816 | Cobalt | 7440-48-4 | 10 | 0.00013 | |
| | | | | Nickel | 7440-02-0 | 10 | 0.00013 | |
| Gold | 7440-57-5 | | | 80 | 0.00107 | | | |
| 4 | Screw | A2 Stainless-Steel (X 2) | 0.508 | Carbon | 7440-44-0 | 0.15 | 0.00125 | 0.83287 |
| | | | | Manganese | 7439-96-5 | 2 | 0.01666 | |
| | | | | Phosphorus | 7723-14-0 | 0.2 | 0.00167 | |
| | | | | Sulfur | 7704-34-9 | 0.15 | 0.00125 | |
| | | | | Silicon | 7440-21-3 | 0.9 | 0.00750 | |
| | | | | Chromium | 7440-47-3 | 18 | 0.14992 | |
| | | | | Nickel | 7440-02-0 | 9 | 0.07496 | |
| | | | | Iron | 7439-89-6 | 69 | 0.57468 | |
| | | | | Molybdenum | 7439-98-7 | 0.6 | 0.00500 | |

MATERIAL DECLARATION SHEET



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| 5 | Voltage Regulator | Gold wire | 0.0089340 | Gold | 7440-57-5 | 100 | 0.01465 | 0.02894 |
| | | Die Attach Adhesive | 0.0016434 | Silver | 7440-22-4 | 79.99993 | 0.00216 | |
| | | | | Epoxy | 85954-11-6 | 20.00007 | 0.00054 | |
| | | Copper and Its Alloys | 0.0054614 | Copper | 7440-50-8 | 97.41 | 0.00872 | |
| | | | | Iron | 7439-89-6 | 2.38 | 0.00021 | |
| | | | | 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 | 0.00193 | |
| | | | | Gold | 7440-57-5 | 0.780172 | 0.00002 | |
| | | | | Palladium | 7440-05-3 | 4.1 | 0.00008 | |
| | | 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 | 0.00034 | 0.01709 |
| | | Lead Frame | 0.0024 | Iron | 7439-89-6 | 57.65 | 0.00227 | |
| | | | | Nickel | 7440-02-0 | 41 | 6.00177 | |
| | | | | 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 | | | |
| Molding | 0.006601 | Silicon Dioxide | 7631-86-9 | 83 | 0.00898 | | | |

MATERIAL DECLARATION SHEET



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| | | Compound | | Zinc Oxide | 1314-13-2 | 1 | 0.00011 | | |
| | | | | Phenol-formaldehyde polymer | 9003-35-4 | 10 | 0.00108 | | |
| | | | | Boron zinc hydroxide oxide | 138265-88-0 | 5 | 0.00054 | | |
| | | | | Carbon black | 1333-86-4 | 1 | 0.00011 | | |
| | | Die Attach Epoxy | 0.00086 | Silver | 7440-22-4 | 75 | 0.00106 | | |
| | | | | Epoxy resin | Trade secret | 25 | 0.00035 | | |
| | | Tin Plating | 0.000213 | Tin | 7440-31-5 | 100 | 0.00035 | | |
| | | Bond Wire | 0.000023 | Gold | 7440-57-5 | 100 | 0.00004 | | |
| | | Die Attach Adhesive | 0.000287 | Silver | 7440-22-4 | 79.99 | 0.00038 | | |
| | | | | Epoxy | 85954-11-6 | 20 | 0.00009 | | |
| | | Lead Frame | 0.006460 | Copper | 7440-50-8 | 97.41 | 0.01032 | | |
| | | | | | Iron | 7439-89-6 | 2.38 | 0.00025 | |
| | | | | | 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 | 0.00018 | | |
| | | | | | 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 | 0.01536 | | |
| | | | | | Carbon Black | 1333-86-4 | 0.5 | 0.00009 | |
| | | | | | Epoxy | 85954-11-6 | 13.5 | 0.00241 | |
| | | Ceramics / Glass | 0.000623 | Doped Silicon | 7440-21-3 | 100 | 0.00102 | | |
| 7 | Voltage Regulators | | | | | | | 0.03018 | |
| 8 | Power | Header filled | 0.05837 | Aluminum hydroxide | 21645-51-2 | 40 | 0.03828 | 0.16395 | |

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| Transformers | thermoplastics. | | Glass fiber | 65997-17-3 | 30 | 0.02871 | |
| | | | Diallyl phthalate resin | 25035-78-3 | 25 | 0.02392 | |
| | | | Antimonyoxide (Sb2O3) | 1309-64-4 | 4.5 | 0.00431 | |
| | Terminal copper alloys | 0.00767 | | Carbon black | 1333-86-4 | 0.5 | 0.00048 |
| | | | | Copper | 7440-50-8 | 93.45 | 0.01175 |
| | | | | Tin | 7440-31-5 | 6.05 | 0.00076 |
| | | | | 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 | 0.0004 | | Nickel | 7440-02-0 | 34 | 0.00022 |
| | | | | Tin | 7440-31-5 | 66 | 0.00043 |
| | Ceramics/glass | 0.01459 | | Ironoxide (Fe3O4) | 1317-61-9 | 70 | 0.01674 |
| | | | | Manganesoxide (Mn3O4) | 1317-35-7 | 17 | 0.00407 |
| | | | | Zincoxide (ZnO) | 1314-13-2 | 13 | 0.00311 |
| | Wire Copper | 0.003593 | | Copper | 7440-50-8 | 98.7 | 0.00581 |
| | | | | Tin | 7440-31-5 | 1.3 | 0.00008 |
| | Wire Lacquers | 0.0003460 | | Polymer with tetrafluoroethene | 26655-00-5 | 99.91 | 0.00057 |
| | Solder | 0.0041900 | | Tin | 7440-31-5 | 96 | 0.00659 |
| | | | | Silver | 7440-22-4 | 4 | 0.00027 |
| | Core Coating | 0.0001500 | | Paracyclophane | 1633-22-3 | 99 | 0.00024 |
| | | | Trade secret | N/A | 1 | 0.00000 | |
| Wire Copper | 0.0018391 | | Copper | 7440-50-8 | 100 | 0.00302 | |

MATERIAL DECLARATION SHEET



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| | | In cable harnesses | | | | | | |
| | | Wire Lacquers | 0.0003309 | Polyurethane | 9009-54-5 | 94.4 | 0.00051 | |
| | | | | Polyamide resin | 70024-79-2 | 5.6 | 0.00003 | |
| | | Wire Copper Alloy | 0.0014453 | Copper | 7440-50-8 | 100 | 0.00237 | |
| | | Wire Tin Plating | 0.0000447 | Tin | 7440-31-5 | 100 | 0.00007 | |
| | | Wire Isolation Lacquers | 0.00153881 | polymer with tetrafluoroethene | 26655-00-5 | 99.58 | 0.00251 | |
| | | | | 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 | 0.00150 | |
| | | | | Tin | 7440-31-5 | 2.05 | 0.00003 | |
| | | Adhesive Sealants | 0.00239 | Bisphenol A Di glycidyl ether resin | 25068-38-6 | 50 | 0.00196 | |
| | | | | Talc | 14807-96-6 | 14 | 0.00055 | |
| | | | | Crystalline silica | 14808-60-7 | 10 | 0.00039 | |
| | | | | Titanium oxide (TiO ₂) | 13463-67-7 | 1 | 0.00004 | |
| | | | | Limestone | 1317-65-3 | 25 | 0.00098 | |
| | | Wire Copper amounts in cable harnesses | 0.0020832 | Copper | 7440-50-8 | 100 | 0.00342 | |
| | | Wire Lacquers | 0.0000868 | Polyurethane | 9009-54-5 | 100 | 0.00014 | |
| 9 | Capacitor | Ceramic element | 0.01511 | Barium oxide | 1304-28-5 | 60 | 0.01486 | 0.03911 |

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| | | Outer electrode | 0.00213 | Titanium dioxide | 13463-67-7 | 30 | - | |
| | | | | Mic | - | 10 | - | |
| | | | 0.00029 | Copper | 7440-50-8 | 100 | 0.00349 | |
| | | | | Glass Di boron trioxide | 1303-86-2 | 20 | 0.00009 | |
| | | | 0.00011 | Silicon dioxide | 7631-86-9 | 80 | - | |
| | | | | Nickel plating | 7440-02-0 | 100 | 0.00019 | |
| | | | 0.00310 | Nickel | 7440-02-0 | 100 | 0.00508 | |
| 0.00312 | Tin plating | 7440-31-5 | 100 | 0.00512 | | | | |
| 10 | Polyphenylene Sulfide | Fiber glass | 0.00350 | Carbon black | 1333-86-4 | 58.5 | 0.00336 | 0.00574 |
| | | | | Glass Fiber | 65997-17-3 | 40 | 0.00230 | |
| | | | | Polyphenylene | 26125-40-6 | 0.5 | 0.00003 | |
| 11 | Shunt | Copper Alloy | 34.6550 | Copper | 7440-50-8 | 99.95 | 56.78903 | 65.99791 |
| | | | | Oxygen | 7782-44-7 | 0.05 | 0.02841 | |
| | | Resistance Material | 5.5910 | Copper | 7440-50-8 | 86 | 7.88322 | |
| | | | | Manganese | 7439-96-5 | 12 | 1.09998 | |
| | | | | Nickel | 7440-02-0 | 2 | 0.18333 | |
| Plating | 0.0050 | Nickel | 7440-02-0 | 100 | 0.00820 | | | |
| 12 | Top housing | Resin | 3.6300 | Polyphenylene Sulfide | 26125-40-6 | 59.5 | 3.54111 | 10.00269 |
| | | | | Glass Fiber | 65997-17-3 | 40 | 0.14522 | |
| | | | | Carbon Black | 1333-86-4 | 0.5 | 0.00025 | |
| 13 | Bottom housing | Resin | 3.154 | Polyphenylene Sulfide | 26125-40-6 | 59.5 | 3.07677 | 8.69108 |
| | | | | Glass fiber | 65997-17-3 | 40 | 0.16309 | |
| | | | | Carbon Black | 1333-86-4 | 0.5 | 0.02586 | |
| 14 | Conformal coating | Coating Silica | 0.679 | Dichlorodimethyl | 68611-44-9 | 97 | 1.07983 | 1.14766 |

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| | | Amino Silane | 0.021 | Aminopropyltriethoxysilane | 919-30-2 | 3 | 0.03340 | |
| 15 | Adhesive | Silicone | 0.800 | Limestone | 1317-65-3 | 90 | 1.18045 | 1.31161 |
| | | | | Trimethoxyvinylsilane | 2768-02-7 | 5 | 0.06558 | |
| | | | | 3-(Trimethoxysilyl) propylamine | 13822-56-5 | 4 | 0.05246 | |
| | | | | Quartz (SiO ₂) | 14808-60-7 | 1 | 0.01312 | |
| 16 | PCB | Copper Alloy | 5.450 | Copper | 7440-50-8 | 100 | 8.93536 | 8.94182 |
| | | Conformal Coating | 0.00015 | Epoxy Resin | 26265-08-7 | 45 | 0.00011 | |
| | | | 0.00350 | Glass Fiber | 65997-17-3 | 45 | 0.00258 | |
| | | | 0.00029 | Silicon dioxide | 7631-86-9 | 10 | 0.00005 | |
| 17 | Solder Preform | Tin - Silver | 0.10420 | Silver | 7440-22-4 | 3.5 | 0.00598 | 0.17084 |
| | | | | Tin | 7440-31-5 | 96.5 | 0.16486 | |
| | | Total Weight | 60.99 | | | | | |

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.