

# MATERIAL DECLARATION SHEET



|                 |                |     |     |                                                                                     |
|-----------------|----------------|-----|-----|-------------------------------------------------------------------------------------|
| Material number | SSD-1000A-R-T  |     |     |  |
| Product Line    | Current Sensor |     |     |                                                                                     |
| Compliance Date | 5/8/2025       |     |     |                                                                                     |
| 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 10UF 16V     | Dielectric            | 0.002               | Barium Titanate (IV)  | 12047-27-7    | 96.700           | 0.002                             | 0.002                         |
|     |                                |                       |                     | Additives             | Trade Secret  | 3.300            | 0.0001                            |                               |
|     |                                | Inner Electrode       | 0.001               | Nickel                | 7440-02-0     | 100.000          | 0.001                             | 0.001                         |
|     |                                | Terminal Electrode    | 3.09                | Copper                | 7440-50-8     | 100.000          | 2.135                             | 2.14                          |
|     |                                | Electro-Plating       | 0.0004              | Nickel                | 7440-02-0     | 62.500           | 0.0002                            | 0.0003                        |
|     |                                |                       |                     | Tin                   | 7440-31-5     | 37.500           | 0.0001                            |                               |
| 2   | Capacitor 0.1uF 25V X7R x8     | Ceramic Substrate     | 0.04                | Barium Titanate (IV)  | 12047-27-7    | 100.000          | 0.028                             | 0.03                          |
|     |                                | Inner electrode       | 0.0007              | Nickel                | 7440-02-0     | 100.000          | 0.001                             | 0.001                         |
|     |                                | Termination electrode | 0.005               | Copper                | 7440-50-8     | 100.000          | 0.004                             | 0.004                         |
|     |                                | Under plating         | 0.0001              | Nickel                | 7440-02-0     | 100.000          | 0.0001                            | 0.0001                        |
|     |                                | Surface plating       | 0.0005              | Tin                   | 7440-31-5     | 100.000          | 0.0003                            | 0.0003                        |
| 3   | Capacitor 22uF 10V X7T x2      | Ceramic Element       | 0.03                | Barium oxide          | 1304-28-5     | 60.000           | 0.013                             | 0.02                          |
|     |                                |                       |                     | Titanium Oxide        | 13463-67-7    | 30.000           | 0.007                             |                               |
|     |                                |                       |                     | Misc.                 | Trade Secret  | 10.000           | 0.002                             |                               |

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|                  |                          |                      |           |                         |              |         |           |           |
|------------------|--------------------------|----------------------|-----------|-------------------------|--------------|---------|-----------|-----------|
|                  |                          | Nickel Plating Layer | 0.0002    | Nickel                  | 7440-02-0    | 100.000 | 0.0002    | 0.0002    |
|                  |                          | Inner Electrode      | 0.01      | Nickel                  | 7440-02-0    | 100.000 | 0.005     | 0.005     |
|                  |                          | Tin Plating Layer    | 0.001     | Tin                     | 7440-31-5    | 100.000 | 0.000     | 0.000     |
|                  |                          | Outer electrode      | 0.006     | Copper                  | 7440-50-8    | 90.000  | 0.004     | 0.004     |
| Diboron trioxide | 1303-86-2                |                      |           | 2.000                   | 0.0001       |         |           |           |
| Silicon dioxide  | 7631-86-9                |                      |           | 8.000                   | 0.0003       |         |           |           |
| 4                | Resistor 47 OHM 1% 1/10W | Ceramic              | 0.002     | Aluminum oxide          | 1344-28-1    | 96.000  | 0.001     | 0.002     |
|                  |                          |                      |           | Silicon dioxide         | 14808-60-7   | 2.000   | 0.00003   |           |
|                  |                          |                      |           | Magnesium oxide         | 1309-48-4    | 2.000   | 0.00003   |           |
|                  |                          | Inner Electrode C1   | 0.00002   | Silver                  | 7440-22-4    | 98.500  | 0.00001   | 0.00001   |
|                  |                          |                      |           | Palladium               | 7440-05-3    | 1.500   | 0.0000002 |           |
|                  |                          | Inner Electrode C2   | 0.00001   | Silver                  | 7440-22-4    | 100.000 | 0.00001   | 0.00001   |
|                  |                          | Resistive layer      | 0.00002   | Silver                  | 7440-22-4    | 10.000  | 0.000001  | 0.00001   |
|                  |                          |                      |           | Ruthenium(IV) oxide     | 12036-10-1   | 72.000  | 0.00001   |           |
|                  |                          |                      |           | Lead bisilicate         | 65997-18-4   | 18.000  | 0.000002  |           |
|                  |                          | Termination          | 0.0002    | Nickel                  | 7440-02-0    | 65.660  | 0.0001    | 0.0001    |
|                  |                          |                      |           | Tin                     | 7440-31-5    | 34.340  | 0.00004   |           |
|                  |                          | Primary glass        | 0.00002   | Glass wool              | 65997-17-3   | 100.000 | 0.00001   | 0.00001   |
|                  |                          | Overcoat II          | 0.00003   | Bisphenol A epoxy resin | 25068-38-6   | 100.000 | 0.00002   | 0.00002   |
|                  |                          | Marking              | 0.0000003 | Bisphenol A epoxy resin | 25068-38-6   | 100.000 | 0.0000002 | 0.0000002 |
| 5                | Ceramic Capacitor 0.22UF | Dielectric           | 0.0037    | Barium Titanate (IV)    | 12047-27-7   | 97.820  | 0.002     | 0.003     |
|                  |                          |                      |           | Additives               | Trade Secret | 2.180   | 0.0001    |           |
|                  |                          | Inner Electrode      | 0.0005    | Nickel                  | 7440-02-0    | 100.000 | 0.0003    | 0.0003    |
|                  |                          | Terminal Electrode   | 0.0009    | Copper                  | 7440-50-8    | 100.000 | 0.001     | 0.001     |
|                  |                          | Electro-Plating      | 0.0001    | Nickel                  | 7440-02-0    | 63.640  | 0.0000    | 0.0001    |
| Tin              | 7440-31-5                |                      |           | 36.360                  | 0.00003      |         |           |           |
| 6                |                          | Inner Electrode      | 0.0005    | Nickel                  | 7440-02-0    | 48.700  | 0.0002    | 0.0003    |

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|   |                                     |                    |          |                      |              |         |           |           |
|---|-------------------------------------|--------------------|----------|----------------------|--------------|---------|-----------|-----------|
| 7 | Resistors SMD<br>200 OHM 0.1%<br>x2 |                    | 0.0018   | Copper               | 7440-50-8    | 49.390  | 0.0002    | 0.0012    |
|   |                                     |                    |          | Tin                  | 7440-31-5    | 1.910   | 0.000006  |           |
|   |                                     | Protective Film    | 0.0018   | Silicon Dioxide      | 7631-86-9    | 66.000  | 0.0008    | 0.0012    |
|   |                                     |                    |          | Misc. not to declare | Proprietary  | 34.000  | 0.0004    |           |
|   |                                     | External Electrode | 0.0003   | Tin                  | 7440-31-5    | 100.000 | 0.0002    | 0.0002    |
|   |                                     | Ceramic            | 0.0072   | Aluminum Oxide       | 1344-28-1    | 99.500  | 0.0050    | 0.0050    |
|   |                                     |                    |          | Silicon Dioxide      | 14808-60-7   | 0.300   | 0.00001   |           |
|   |                                     |                    |          | Magnesium Oxide      | 1309-48-4    | 0.200   | 0.00001   |           |
|   |                                     | Resistive element  | 0.000001 | Nickel               | 7440-02-0    | 50.000  | 0.0000004 | 0.0000008 |
|   |                                     |                    |          | Chromium             | 7440-47-3    | 50.000  | 0.0000004 |           |
|   |                                     | Marking            | 0.00003  | Silicon Dioxide      | 7631-86-9    | 100.000 | 0.00002   | 0.00002   |
|   | TVS Diode<br>60VWM 96.8VC           | Dice               | 0.001    | Silicon              | 7440-21-3    | 60.180  | 0.001     | 0.001     |
|   |                                     |                    |          | Phosphorus           | 7723-14-0    | 0.010   | 0.0000001 |           |
|   |                                     |                    |          | Boron                | 7440-42-8    | 0.010   | 0.0000001 |           |
|   |                                     |                    |          | Nickel               | 7440-02-0    | 14.800  | 0.0001    |           |
|   |                                     |                    |          | Lead                 | 7439-92-1    | 12.500  | 0.0001    |           |
|   |                                     |                    |          | Silicon Dioxide      | 7631-86-9    | 10.000  | 0.0001    |           |
|   |                                     |                    |          | Aluminum Oxide       | 1344-28-1    | 2.500   | 0.00002   |           |
|   |                                     | Solder paste       | 0.002    | Tin                  | 7440-31-5    | 5.000   | 0.00007   | 0.001     |
|   |                                     |                    |          | Lead                 | 7439-92-1    | 92.500  | 0.001     |           |
|   |                                     |                    |          | Silver               | 7440-22-4    | 2.500   | 0.00003   |           |
|   |                                     | Lead frame         | 0.03     | Copper               | 7440-50-8    | 99.800  | 0.019     | 0.02      |
|   |                                     |                    |          | Iron                 | 7439-89-6    | 0.150   | 0.00003   |           |
|   |                                     |                    |          | Phosphorus           | 7723-14-0    | 0.050   | 0.00001   |           |
|   |                                     | Epoxy              | 0.031    | Silicon dioxide      | 14808-60-7   | 76.000  | 0.02      | 0.02      |
|   |                                     |                    |          | Epoxy resin          | 25928-94-3   | 9.000   | 0.002     |           |
|   |                                     |                    |          | Phenolic resin-A,B   | 9003-35-4    | 8.000   | 0.002     |           |
|   |                                     |                    |          | Hydroxide metal      | Trade Secret | 6.000   | 0.001     |           |
|   |                                     |                    |          | Carbon black         | 1333-86-4    | 1.000   | 0.0002    |           |
|   |                                     | Plating            | 0.0007   | Tin                  | 7440-31-5    | 100.000 | 0.0005    | 0.0005    |

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|   |                                |                |          |                                        |              |         |          |          |
|---|--------------------------------|----------------|----------|----------------------------------------|--------------|---------|----------|----------|
| 8 | Voltage Regulator Non-Isolated | Ferrite Core   | 0.024    | Iron Oxide                             | 1332-37-2    | 65.000  | 0.01     | 0.02     |
|   |                                |                |          | Copper oxide                           | 1317-38-0    | 4.200   | 0.001    |          |
|   |                                |                |          | Nickel monoxide                        | 1313-99-1    | 8.800   | 0.001    |          |
|   |                                |                |          | Zinc Oxide                             | 1314-13-2    | 22.000  | 0.004    |          |
|   |                                | Epoxy          | 0.005    | Bisphenol A epoxy resin                | 25068-38-6   | 100.000 | 0.003    | 0.003    |
|   |                                | Terminal       | 0.0003   | Silver                                 | 7440-22-4    | 100.000 | 0.0002   | 0.0002   |
|   |                                | Plating        | 0.0005   | Nickel                                 | 7440-02-0    | 33.000  | 0.0001   | 0.0004   |
|   |                                |                |          | Tin                                    | 7440-31-5    | 67.000  | 0.0002   |          |
|   |                                | Ceramics/Glass | 0.0018   | Silicon                                | 7440-21-3    | 100.000 | 0.001    | 0.001    |
|   |                                | Wire           | 0.007    | Polyurethane Foam                      | 9009-54-5    | 4.000   | 0.0002   | 0.00     |
|   |                                |                |          | Copper                                 | 7440-50-8    | 96.000  | 0.005    |          |
|   |                                | Marking        | 0.000001 | Cellulose nitrate                      | 9004-70-0    | 100.000 | 0.000001 | 0.000001 |
|   |                                | Solder paste   | 0.001    | Ethoxylated tallow amine               | 61791-26-2   | 3.900   | 0.00003  | 0.001    |
|   |                                |                |          | Di-carboxylic acids                    | 68937-72-4   | 2.750   | 0.00002  |          |
|   |                                |                |          | Alpha-terpineol                        | 98-55-5      | 3.500   | 0.00002  |          |
|   |                                |                |          | Copper Powder                          | 7440-22-4    | 3.200   | 0.00002  |          |
|   |                                |                |          | Zinc                                   | 7440-31-5    | 86.650  | 0.001    |          |
|   |                                | Plating        | 0.0035   | Copper                                 | 7440-50-8    | 100.000 | 0.002    | 0.002    |
|   |                                | Solder Mask    | 0.00035  | Modified epoxy resin                   | Propietary   | 37.000  | 0.0001   | 0.0002   |
|   |                                |                |          | Organic substance                      | Propietary   | 6.000   | 0.00001  |          |
|   |                                |                |          | Barium sulphate                        | 7727-43-7    | 14.000  | 0.00003  |          |
|   |                                |                |          | 1-Butanol,3-methoxy-3-methyl-,acetate) | Propietary   | 15.000  | 0.00004  |          |
|   |                                |                |          | Solvent naphtha(heavy arom)            | Propietary   | 5.000   | 0.00001  |          |
|   |                                |                |          | Talc                                   | 14807-96-6   | 13.000  | 0.00003  |          |
|   |                                |                |          | Silicon ,vitreous                      | trade secret | 10.000  | 0.00002  |          |
|   |                                | Prepreg        | 1.556    | Silicon Dioxide                        | 7631-86-9    | 50.000  | 0.54     | 1.08     |
|   |                                |                |          | Glass, oxide, chemicals                | 65997-17-3   | 39.000  | 0.42     |          |
|   |                                |                |          | Epoxy resin A                          | Propietary   | 7.000   | 0.08     |          |
|   |                                |                |          | Cyanate Resin                          | Propietary   | 3.000   | 0.032    |          |
|   |                                |                |          | Epoxy resin B                          | Propietary   | 1.000   | 0.011    |          |

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|    |                                           |                                |        |                         |              |         |           |        |
|----|-------------------------------------------|--------------------------------|--------|-------------------------|--------------|---------|-----------|--------|
|    |                                           | ABF                            | 0.0011 | Silicon Dioxide         | 7631-86-9    | 62.460  | 0.0005    | 0.001  |
|    |                                           |                                |        | Bisphenol A epoxy resin | 25068-38-6   | 3.930   | 0.00003   |        |
|    |                                           |                                |        | Others, not to declare  | Trade Secret | 33.610  | 0.00025   |        |
| 9  | Capacitor CER<br>0.033UF                  | Dielectric                     | 0.010  | Barium Titanate (IV)    | 12047-27-7   | 3.580   | 0.0002    | 0.007  |
|    |                                           |                                |        | Calcium zirconate       | 12013-47-7   | 93.350  | 0.006     |        |
|    |                                           |                                |        | Other, not to declare   | Trade Secret | 3.070   | 0.0002    |        |
|    |                                           | Inner Electrode                | 0.003  | Strontium oxide         | 1314-11-0    | 53.690  | 0.0013    | 0.002  |
|    |                                           |                                |        | Nickel                  | 7440-02-0    | 46.310  | 0.0011    |        |
|    |                                           | Electro-plating                | 0.0003 | Nickel                  | 7440-02-0    | 38.000  | 0.0001    | 0.0002 |
|    |                                           |                                |        | Tin                     | 7440-31-5    | 62.000  | 0.0001    |        |
|    |                                           | Terminal Electrode             | 0.0022 | Copper                  | 7440-50-8    | 100.000 | 0.0015    | 0.002  |
| 10 | Connector R/A<br>2POS 0.38um<br>GOLD 2    | LCP-GF30                       | 0.21   | Carbon Black            | 1333-86-4    | 0.500   | 0.001     | 0.145  |
|    |                                           |                                |        | Liquid Crystal Polymer  | 70679-92-4   | 68.000  | 0.1       |        |
|    |                                           |                                |        | Further Additives       | Trade Secret | 1.500   | 0.002     |        |
|    |                                           |                                |        | Glass Fiber             | 65997-17-3   | 30.000  | 0.044     |        |
|    |                                           | Tin Plating                    | 0.002  | Tin                     | 7440-31-5    | 100.000 | 0.001     | 0.001  |
|    |                                           | Gold Plating                   | 0.0002 | Cobalt                  | 7440-48-4    | 0.250   | 0.0000004 | 0.0001 |
|    |                                           |                                |        | Nickel                  | 7440-02-0    | 0.250   | 0.0000004 |        |
|    |                                           |                                |        | Gold                    | 7440-57-5    | 99.500  | 0.0001    |        |
|    |                                           | Nickel Plating                 | 0.003  | Nickel                  | 7440-02-0    | 100.000 | 0.002     | 0.002  |
|    |                                           | Cartridge Brass<br>70% Unplate | 0.086  | Copper                  | 7440-50-8    | 70.000  | 0.042     | 0.06   |
|    |                                           |                                |        | Nickel                  | 7440-02-0    | 30.000  | 0.018     |        |
| 11 | Connector R/A<br>4POS 0.38um<br>GOLD 2 x2 | LCP-GF30                       | 0.7    | Carbon Black            | 1333-86-4    | 0.500   | 0.002     | 0.470  |
|    |                                           |                                |        | Liquid Crystal Polymer  | 70679-92-4   | 68.000  | 0.320     |        |
|    |                                           |                                |        | Further Additives       | Trade Secret | 1.500   | 0.007     |        |
|    |                                           |                                |        | Glass Fiber             | 65997-17-3   | 30.000  | 0.141     |        |
|    |                                           | Tin Plating                    | 0.007  | Tin                     | 7440-31-5    | 100.000 | 0.005     | 0.005  |

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|    |                           |                                |         |                       |                 |         |             |         |
|----|---------------------------|--------------------------------|---------|-----------------------|-----------------|---------|-------------|---------|
|    |                           | Gold Plating                   | 0.0008  | Cobalt                | 7440-48-4       | 99.500  | 0.001       | 0.001   |
|    |                           |                                |         | Nickel                | 7440-02-0       | 0.250   | 0.000001    |         |
|    |                           |                                |         | Gold                  | 7440-57-5       | 0.250   | 0.000001    |         |
|    |                           | Nickel Plating                 | 0.01    | Nickel                | 7440-02-0       | 100.000 | 0.009       | 0.009   |
|    |                           | Cartridge Brass<br>70% Unplate | 0.344   | Copper                | 7440-50-8       | 70.000  | 0.166       | 0.238   |
|    |                           |                                |         | Nickel                | 7440-02-0       | 30.000  | 0.071       |         |
|    |                           |                                |         | Copper                | 7440-50-8       | 97.534  | 0.00004     | 0.00004 |
| 12 | Analog Front<br>End<br>IC | Bond Wire                      | 0.00006 | Proprietary materials | Trade<br>Secret | 0.011   | 0.000000005 |         |
|    |                           |                                |         | Gold                  | 7440-57-5       | 0.052   | 0.000000002 |         |
|    |                           |                                |         | Palladium             | 7440-05-3       | 2.400   | 0.000001    |         |
|    |                           |                                |         | Silver                | 7440-22-4       | 0.003   | 0.000000001 |         |
|    |                           |                                |         | Silver                | 7440-22-4       | 80.000  | 0.0004      | 0.0005  |
|    |                           | Die Attach<br>Adhesive         | 0.00068 | Epoxy                 | 85954-11-6      | 20.000  | 0.0001      |         |
|    |                           | Lead Frame                     | 0.0286  | Copper                | 7440-50-8       | 97.585  | 0.02        | 0.02    |
|    |                           |                                |         | Iron                  | 7439-89-6       | 2.300   | 0.0005      |         |
|    |                           |                                |         | Phosphorus            | 7723-14-0       | 0.015   | 0.000003    |         |
|    |                           |                                |         | Zinc                  | 7440-66-6       | 0.100   | 0.00002     |         |
|    |                           | Lead Frame<br>Plating          | 0.0001  | Nickel                | 7440-02-0       | 95.120  | 0.0001      | 0.0001  |
|    |                           |                                |         | Gold                  | 7440-57-5       | 0.780   | 0.000001    |         |
|    |                           |                                |         | Palladium             | 7440-05-3       | 4.100   | 0.000003    |         |
|    |                           | Mold Compound                  | 0.046   | Silicon Dioxide       | 60676-86-0      | 86.000  | 0.03        | 0.03    |
|    |                           |                                |         | Carbon Black          | 1333-86-4       | 0.300   | 0.0001      |         |
|    |                           |                                |         | Epoxy                 | 85954-11-6      | 13.700  | 0.004       |         |
|    |                           | Semiconductor                  | 0.002   | Silicon               | 7440-21-3       | 100.000 | 0.002       | 0.002   |
| 13 | Voltage<br>Regulators IC  | Bond Wire                      | 0.00002 | Gold                  | 7440-57-5       | 100.000 | 0.00002     | 0.00002 |
|    |                           | Die Attach<br>Adhesive         | 0.00029 | Silver                | 7440-22-4       | 80.000  | 0.0002      | 0.00020 |
|    |                           |                                |         | Epoxy                 | 85954-11-6      | 20.000  | 0.00004     |         |
|    |                           |                                |         | Copper                | 7440-50-8       | 97.420  | 0.0043      | 0.00446 |
|    |                           | Lead Frame                     | 0.006   | Iron                  | 7439-89-6       | 2.380   | 0.0001      |         |
|    |                           |                                |         | Phosphorus            | 7723-14-0       | 0.080   | 0.000004    |         |

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|    |                                  |                    |        |                                |              |         |          |         |
|----|----------------------------------|--------------------|--------|--------------------------------|--------------|---------|----------|---------|
|    |                                  | Lead Frame Plating | 0.0001 | Zinc                           | 7440-66-6    | 0.120   | 0.00001  | 0.00008 |
|    |                                  |                    |        | Nickel                         | 7440-02-0    | 95.120  | 0.0001   |         |
|    |                                  |                    |        | Gold                           | 7440-57-5    | 0.780   | 0.000001 |         |
|    |                                  |                    |        | Palladium                      | 7440-05-3    | 4.100   | 0.000003 |         |
|    |                                  | Mold Compound      | 0.011  | Silicon Dioxide                | 60676-86-0   | 86.000  | 0.0063   | 0.00738 |
|    |                                  |                    |        | Carbon Black                   | 1333-86-4    | 0.500   | 0.00004  |         |
|    |                                  |                    |        | Epoxy                          | 85954-11-6   | 13.500  | 0.0010   |         |
| 14 | Ceramic Capacitor 1UF 25V X7R x4 | Semiconductor      | 0.0009 | Silicon                        | 7440-21-3    | 100.000 | 0.001    | 0.00060 |
|    |                                  | Dielectric         | 0.015  | Barium Titanate (IV)           | 12047-27-7   | 100.000 | 0.010    | 0.010   |
|    |                                  | Inner electrode    | 0.009  | Nickel                         | 7440-02-0    | 100.000 | 0.006    | 0.006   |
|    |                                  | First Layer        | 0.0007 | Copper                         | 7440-50-8    | 100.000 | 0.000    | 0.000   |
|    |                                  | Second Layer       | 0.0007 | Nickel                         | 7440-02-0    | 100.000 | 0.0005   | 0.0005  |
| 15 | Microcontroller IC               | Third Layer        | 0.0006 | Tin                            | 7440-31-5    | 100.000 | 0.0004   | 0.0004  |
|    |                                  | Mold Compound      | 0.23   | Silica, Vitreous               | 60676-86-0   | 86.910  | 0.14     | 0.16    |
|    |                                  |                    |        | Epoxy Resin                    | Trade Secret | 7.670   | 0.01     |         |
|    |                                  |                    |        | Phenolic Resin                 | Trade Secret | 5.110   | 0.01     |         |
|    |                                  |                    |        | Carbon Black                   | 1333-86-4    | 0.310   | 0.000    |         |
|    |                                  | Die Attach         | 0.002  | Silver                         | 7440-22-4    | 75.000  | 0.001    | 0.001   |
|    |                                  |                    |        | Modified Epoxy Resin           | 13561-08-5   | 14.000  | 0.0002   |         |
|    |                                  |                    |        | Diglycidylether of Bisphenol-F | 54208-63-8   | 7.500   | 0.0001   |         |
|    |                                  |                    |        | Modified Amine                 | 827-43-0     | 3.500   | 0.0001   |         |
|    |                                  | Lead Frame         | 0.030  | Copper                         | 7440-50-8    | 95.540  | 0.02     | 0.02    |
|    |                                  |                    |        | Iron                           | 7439-89-6    | 2.350   | 0.000    |         |
|    |                                  |                    |        | Silver                         | 7440-22-4    | 1.900   | 0.0004   |         |
|    |                                  |                    |        | Zinc                           | 7440-66-6    | 0.130   | 0.0000   |         |
|    |                                  |                    |        | Phosphorous                    | 7723-14-0    | 0.080   | 0.00002  |         |
|    |                                  | Chip (Die)         | 0.022  | Doped Silicon                  | 7440-21-3    | 100.000 | 0.01     | 0.01    |
|    |                                  | Bond Wire          | 0.001  | Doped Gold                     | 7440-57-5    | 100.000 | 0.0004   | 0.0004  |
|    |                                  | Plating            | 0.004  | Tin                            | 7440-31-5    | 100.000 | 0.002    | 0.002   |

# MATERIAL DECLARATION SHEET



|    |                     |                       |           |                 |            |         |             |         |
|----|---------------------|-----------------------|-----------|-----------------|------------|---------|-------------|---------|
| 16 | IC Transceiver Half | Bond Wire             | 0.0004768 | Iron            | 7439-89-6  | 0.0002  | 0.000000001 | 0.00033 |
|    |                     |                       |           | Calcium         | 7440-70-2  | 0.0002  | 0.000000001 |         |
|    |                     |                       |           | Yttriu          | 7440-65-5  | 0.001   | 0.000000002 |         |
|    |                     |                       |           | Gold            | 7440-57-5  | 99.998  | 0.000329440 |         |
|    |                     |                       |           | Silver          | 7440-22-4  | 0.001   | 0.000000003 |         |
|    |                     | Die Attach Adhesive   | 0.0004815 | Silver          | 7440-22-4  | 75.000  | 0.00025     | 0.0003  |
|    |                     |                       |           | Epoxy           | 85954-11-6 | 25.000  | 0.00008     |         |
|    |                     | Die Attach Adhesive 2 | 0.0001817 | Silver          | 7440-22-4  | 75.000  | 0.00009     | 0.0001  |
|    |                     |                       |           | Epoxy           | 85954-11-6 | 25.000  | 0.00003     |         |
|    |                     | Die Attach Adhesive 3 | 0.0001817 | Silver          | 7440-22-4  | 75.000  | 0.00009     | 0.0001  |
|    |                     |                       |           | Epoxy           | 85954-11-6 | 25.000  | 0.00003     |         |
|    |                     | Lead Frame            | 0.415223  | Copper          | 7440-50-8  | 97.050  | 0.27844     | 0.29    |
|    |                     |                       |           | Iron            | 7439-89-6  | 2.600   | 0.00746     |         |
|    |                     |                       |           | Phosphorus      | 7723-14-0  | 0.150   | 0.00043     |         |
|    |                     |                       |           | Zinc            | 7440-66-6  | 0.200   | 0.00057     |         |
|    |                     | Lead Frame Plating    | 0.001444  | Nickel          | 7440-02-0  | 95.120  | 0.00095     | 0.001   |
|    |                     |                       |           | Gold            | 7440-57-5  | 0.780   | 0.00001     |         |
|    |                     |                       |           | Palladium       | 7440-05-3  | 4.100   | 0.00004     |         |
|    |                     | Semiconductor         | 0.003     | Silicon         | 7440-21-3  | 100.000 | 0.00173     | 0.002   |
|    |                     | Semiconductor 2       | 0.0009    | Silicon         | 7440-21-3  | 100.000 | 0.00065     | 0.001   |
|    |                     | Semiconductor 3       | 0.0009    | Silicon         | 7440-21-3  | 100.000 | 0.00065     | 0.001   |
|    |                     | Mold Compound         | 0.34      | Silicon Dioxide | 60676-86-0 | 89.500  | 0.20924     | 0.23    |
|    |                     |                       |           | Chlorine        | 7782-50-5  | 0.002   | 0.000005    |         |
|    |                     |                       |           | Carbon Black    | 1333-86-4  | 0.500   | 0.00117     |         |
|    |                     |                       |           | Epoxy           | 85954-11-6 | 9.998   | 0.02337     |         |
| 17 | Diode 10V 300MW SO  | Die                   | 0.0005    | Silicon         | 7440-21-3  | 100.000 | 0.0003      | 0.0003  |
|    |                     | Lead Frame            | 0.0009    | Nickel          | 7440-02-0  | 36.300  | 0.0002      | 0.001   |
|    |                     |                       |           | Iron            | 7439-89-6  | 50.200  | 0.0003      |         |
|    |                     |                       |           | Copper          | 7440-50-8  | 13.500  | 0.0001      |         |

# MATERIAL DECLARATION SHEET



|    |                           |                       |         |                                                    |              |         |          |         |
|----|---------------------------|-----------------------|---------|----------------------------------------------------|--------------|---------|----------|---------|
|    |                           | Mold Compound         | 0.003   | Boron zinc hydroxide oxide                         | 138265-88-0  | 3.000   | 0.0001   | 0.002   |
|    |                           |                       |         | Zinc Monoxide                                      | 1314-13-2    | 0.500   | 0.00001  |         |
|    |                           |                       |         | 2,4,6-triamino-s-triazincompd.withs-triazine-triol | 37640-57-6   | 3.000   | 0.0001   |         |
|    |                           |                       |         | Silica Amorphous                                   | 7631-86-9    | 80.000  | 0.002    |         |
|    |                           |                       |         | Carbon Black                                       | 1333-86-4    | 1.000   | 0.00002  |         |
|    |                           |                       |         | Ortho-Cresol Novolac Resin                         | 29690-82-2   | 8.000   | 0.0002   |         |
|    |                           |                       |         | Phenolic Resin                                     | 9003-35-4    | 4.500   | 0.0001   |         |
| 18 | Capacitor 16pF 50V NPO x2 | Plating               | 0.0001  | Tin                                                | 7440-31-5    | 100.000 | 0.0001   | 0.0001  |
|    |                           | Wire Bond - Cu        | 0.00001 | Copper                                             | 7440-50-8    | 100.000 | 0.0001   | 0.00001 |
|    |                           | Ceramic Substrate     | 0.009   | Calcium zirconium oxide                            | 12013-47-7   | 100.000 | 0.006    | 0.006   |
|    |                           | Inner Electrode       | 0.0005  | Nickel                                             | 7440-02-0    | 100.000 | 0.0004   | 0.0004  |
|    |                           | Termination Electrode | 0.001   | Copper                                             | 7440-50-8    | 100.000 | 0.001    | 0.001   |
| 19 | Microchip IC              | Under plating         | 0.00008 | Nickel                                             | 7440-02-0    | 100.000 | 0.0001   | 0.0001  |
|    |                           | Surface plating       | 0.0002  | Tin                                                | 7440-31-5    | 100.000 | 0.0002   | 0.0002  |
|    |                           | Mold Compound         | 0.0013  | Silica                                             | 60676-86-0   | 86.910  | 0.001    | 0.001   |
|    |                           |                       |         | Epoxy Resin                                        | Trade Secret | 7.670   | 0.0001   |         |
|    |                           |                       |         | Phenolic Resin                                     | Trade Secret | 5.110   | 0.00005  |         |
|    |                           |                       |         | Carbon Black                                       | 1333-86-4    | 0.310   | 0.000003 |         |
|    |                           | Lead Frame            | 0.00168 | Copper                                             | 7440-50-8    | 95.540  | 0.001    | 0.001   |
|    |                           |                       |         | Iron                                               | 7439-89-6    | 2.350   | 0.00003  |         |
|    |                           |                       |         | Silver                                             | 7440-22-4    | 1.900   | 0.00002  |         |
|    |                           |                       |         | Zinc                                               | 7440-66-6    | 0.130   | 0.000002 |         |
|    |                           |                       |         | Phosphorus                                         | 7723-14-0    | 0.080   | 0.000001 |         |
|    |                           | Die Attach            | 0.00012 | Silver                                             | 7440-22-4    | 75.000  | 0.0001   | 0.0001  |
|    |                           |                       |         | 2,6-diglycidylphenyl glycidyl ether                | 13561-08-5   | 14.000  | 0.00001  |         |

# MATERIAL DECLARATION SHEET



|    |                                    |                                       |          |                                              |            |         |           |         |
|----|------------------------------------|---------------------------------------|----------|----------------------------------------------|------------|---------|-----------|---------|
|    |                                    |                                       |          | Bisphenol A epoxy resin                      | 54208-63-8 | 7.500   | 0.00001   |         |
|    |                                    |                                       |          | 4-methyl-2-phenylimidazole                   | 827-43-0   | 3.500   | 0.000003  |         |
| 20 | Resistor 10K<br>OHM 1% 1/10W<br>x2 | Chip (Die)                            | 0.0012   | Doped Silicon                                | 7440-21-3  | 100.000 | 0.001     | 0.001   |
|    |                                    | Wire Bond                             | 0.00003  | Copper                                       | 7440-50-8  | 98.250  | 0.00002   | 0.00002 |
|    |                                    |                                       |          | Palladium                                    | 7440-05-3  | 1.750   | 0.0000004 |         |
|    |                                    | Plating                               | 0.0002   | Tin                                          | 7440-31-5  | 100.000 | 0.0001    | 0.0001  |
|    |                                    | Ceramic<br>Substrate                  | 0.0033   | Aluminum Oxide                               | 1344-28-1  | 96.000  | 0.002     | 0.002   |
|    |                                    |                                       |          | Silicon Dioxide                              | 14808-60-7 | 3.000   | 0.0001    |         |
|    |                                    |                                       |          | Magnesium Oxide                              | 1309-48-4  | 1.000   | 0.00002   |         |
|    |                                    | Inner<br>termination - top<br>side    | 0.0002   | Silver                                       | 7440-22-4  | 70.000  | 0.0001    | 0.0001  |
|    |                                    |                                       |          | Palladium                                    | 7440-05-3  | 0.400   | 0.000001  |         |
|    |                                    |                                       |          | Ethyl cellulose                              | 9004-57-3  | 8.000   | 0.00001   |         |
|    |                                    |                                       |          | Butyl carbitol                               | 112-34-5   | 21.600  | 0.00003   |         |
|    |                                    | Inner<br>termination -<br>bottom side | 0.0001   | Silver                                       | 7440-22-4  | 61.000  | 0.00004   | 0.0001  |
|    |                                    |                                       |          | Butyl digol                                  | 112-34-5   | 22.000  | 0.00002   |         |
|    |                                    |                                       |          | Terpineol                                    | 8000-41-7  | 17.000  | 0.00001   |         |
|    |                                    | Resistive<br>element                  | 0.00005  | Silver                                       | 7440-22-4  | 25.000  | 0.00001   | 0.00004 |
|    |                                    |                                       |          | Palladium                                    | 7440-05-3  | 5.000   | 0.000002  |         |
|    |                                    |                                       |          | Ruthenium oxide                              | 12036-10-1 | 35.000  | 0.00001   |         |
|    |                                    |                                       |          | Lead                                         | 7439-92-1  | 11.66   | 0.000004  |         |
|    |                                    |                                       |          | Boron                                        | 7440-42-8  | 11.67   | 0.000004  |         |
|    |                                    | Pre-coat                              | 0.00004  | Lead bisilicate                              | 65997-18-4 | 75.000  | 0.00002   | 0.00003 |
|    |                                    |                                       |          | Terpineol                                    | 8000-41-7  | 25.000  | 0.00001   |         |
|    |                                    | Over-coat                             | 0.00004  | Polydimethylsiloxane                         | 9016-00-6  | 100.000 | 0.00003   | 0.00003 |
|    |                                    | Marking                               | 0.000008 | Bisphenol A diglycidyl ether<br>homopolymer  | 25085-99-8 | 50.000  | 0.000003  | 0.00001 |
|    |                                    |                                       |          | Barium Sulfate                               | 7727-43-7  | 15.000  | 0.000001  |         |
|    |                                    |                                       |          | Titanium dioxide                             | 13463-67-7 | 30.000  | 0.000002  |         |
|    |                                    |                                       |          | Diethylene glycol monoethyl<br>ether acetate | 112-15-2   | 5.000   | 0.0000003 |         |

# MATERIAL DECLARATION SHEET



|    |                                     |                                 |          |                                           |            |         |           |          |
|----|-------------------------------------|---------------------------------|----------|-------------------------------------------|------------|---------|-----------|----------|
|    |                                     | Middle Termination              | 0.000099 | Nickel                                    | 7440-02-0  | 100.000 | 0.0001    | 0.0001   |
|    |                                     | Side termination                | 0.000004 | Nickel                                    | 7440-02-0  | 80.000  | 0.000002  | 0.000003 |
|    |                                     |                                 |          | Chromium                                  | 7440-47-3  | 20.000  | 0.000001  |          |
|    |                                     | Outer termination               | 0.000004 | Tin                                       | 7440-31-5  | 100.000 | 0.000003  | 0.000003 |
| 21 | Resistor 2.2K<br>OHM 1% 1/10W<br>x2 | Ceramic Substrate               | 0.0033   | Aluminum Oxide                            | 1344-28-1  | 96.000  | 0.002     | 0.002    |
|    |                                     |                                 |          | Silicon Dioxide                           | 14808-60-7 | 3.000   | 0.0001    |          |
|    |                                     |                                 |          | Magnesium Oxide                           | 1309-48-4  | 1.000   | 0.00002   |          |
|    |                                     | Inner termination - top side    | 0.00019  | Silver                                    | 7440-22-4  | 70.000  | 0.0001    | 0.0001   |
|    |                                     |                                 |          | Palladium                                 | 7440-05-3  | 0.400   | 0.000001  |          |
|    |                                     |                                 |          | Ethyl cellulose                           | 9004-57-3  | 8.000   | 0.00001   |          |
|    |                                     |                                 |          | Butyl carbitol                            | 112-34-5   | 21.600  | 0.00003   |          |
|    |                                     | Inner termination - bottom side | 0.0001   | Silver                                    | 7440-22-4  | 61.000  | 0.00004   | 0.0001   |
|    |                                     |                                 |          | Butyl digol                               | 112-34-5   | 22.000  | 0.00002   |          |
|    |                                     |                                 |          | Terpineol                                 | 8000-41-7  | 17.000  | 0.00001   |          |
|    |                                     | Resistive element               | 0.00005  | Silver                                    | 7440-22-4  | 25.000  | 0.00001   | 0.00004  |
|    |                                     |                                 |          | Palladium                                 | 7440-05-3  | 5.000   | 0.000002  |          |
|    |                                     |                                 |          | Ruthenium oxide                           | 12036-10-1 | 35.000  | 0.00001   |          |
|    |                                     |                                 |          | Lead                                      | 7439-92-1  | 11.66   | 0.000004  |          |
|    |                                     |                                 |          | Boron                                     | 7440-42-8  | 11.67   | 0.000004  |          |
|    |                                     |                                 |          | Silica                                    | 10279-57-9 | 11.67   | 0.000004  |          |
|    |                                     | Pre-coat                        | 0.00004  | Lead bisilicate                           | 65997-18-4 | 75.000  | 0.00002   | 0.00003  |
|    |                                     |                                 |          | Terpineol                                 | 8000-41-7  | 25.000  | 0.00001   |          |
|    |                                     | Over-coat                       | 0.00004  | Polydimethylsiloxane                      | 9016-00-6  | 100.000 | 0.00003   | 0.00003  |
|    |                                     | Marking                         | 0.000008 | Bisphenol A diglycidyl ether homopolymer  | 25085-99-8 | 50.000  | 0.000003  | 0.00001  |
|    |                                     |                                 |          | Barium Sulfate                            | 7727-43-7  | 15.000  | 0.000001  |          |
|    |                                     |                                 |          | Titanium dioxide                          | 13463-67-7 | 30.000  | 0.000002  |          |
|    |                                     |                                 |          | Diethylene glycol monoethyl ether acetate | 112-15-2   | 5.000   | 0.0000003 |          |

# MATERIAL DECLARATION SHEET



|    |                          |                      |           |                 |            |         |             |           |
|----|--------------------------|----------------------|-----------|-----------------|------------|---------|-------------|-----------|
|    |                          | Middle Termination   | 0.000099  | Nickel          | 7440-02-0  | 100.000 | 0.0001      | 0.0001    |
|    |                          | Side termination     | 0.000004  | Nickel          | 7440-02-0  | 80.000  | 0.000002    | 0.000003  |
|    |                          |                      |           | Chromium        | 7440-47-3  | 20.000  | 0.000001    |           |
|    |                          | Outer termination    | 0.000004  | Tin             | 7440-31-5  | 100.000 | 0.000003    | 0.000003  |
| 22 | Transformer Driver IC    | Die Attach Adhesive  | 0.0002    | Silver          | 7440-22-4  | 80.000  | 0.0001      | 0.0001    |
|    |                          |                      |           | Epoxy           | 85954-11-6 | 20.000  | 0.00002     |           |
|    |                          | Lead Frame           | 0.006     | Copper          | 7440-50-8  | 97.443  | 0.004       | 0.004     |
|    |                          |                      |           | Iron            | 7439-89-6  | 2.350   | 0.0001      |           |
|    |                          |                      |           | Phosphorus      | 7723-14-0  | 0.083   | 0.000003    |           |
|    |                          |                      |           | Zinc            | 7440-66-6  | 0.125   | 0.00000     |           |
|    |                          | Bond Wire            | 0.00009   | Gold            | 7440-57-5  | 100.000 | 0.0001      | 0.0001    |
|    |                          | Lead Frame Plating   | 0.0000004 | Nickel          | 7440-02-0  | 95.240  | 0.0000003   | 0.0000003 |
|    |                          |                      |           | Gold            | 7440-57-5  | 0.760   | 0.000000002 |           |
|    |                          |                      |           | Palladium       | 7440-05-3  | 4.000   | 0.00000001  |           |
|    |                          | Mold Compound        | 0.009     | Fused Silica    | 60676-86-0 | 86.000  | 0.005       | 0.01      |
|    |                          |                      |           | Carbon Black    | 1333-86-4  | 0.500   | 0.00003     |           |
|    |                          |                      |           | Epoxy           | 85954-11-6 | 13.500  | 0.001       |           |
|    |                          | Semiconductor Device | 0.0003    | Doped Silicon   | 7440-21-3  | 100.000 | 0.0002      | 0.0002    |
| 23 | Resistor 1M OHM 5% 1/10W | Substrate            | 0.002     | Aluminum Oxide  | 1344-28-1  | 96.600  | 0.0012      | 0.001     |
|    |                          |                      |           | Silicon Dioxide | 14808-60-7 | 2.100   | 0.00003     |           |
|    |                          |                      |           | Magnesium Oxide | 1309-48-4  | 1.000   | 0.00001     |           |
|    |                          |                      |           | Calcium Oxide   | 1305-78-8  | 0.300   | 0.000004    |           |
|    |                          | Top Terminal         | 0.00001   | Silver          | 7440-22-4  | 96.880  | 0.00001     | 0.00001   |
|    |                          |                      |           | Palladium       | 7440-05-3  | 1.310   | 0.0000001   |           |
|    |                          |                      |           | Lead Oxide      | 1317-16-8  | 0.900   | 0.0000001   |           |
|    |                          |                      |           | Cupric Oxide    | 1317-38-0  | 0.600   | 0.0000001   |           |
|    |                          |                      |           | Silicon Dioxide | 7631-86-9  | 0.310   | 0.00000003  |           |
|    |                          | Bottom Terminal      | 0.00002   | Silver          | 7440-22-4  | 97.490  | 0.00001     | 0.00001   |
|    |                          |                      |           | Lead Oxide      | 1317-16-8  | 1.500   | 0.0000002   |           |

# MATERIAL DECLARATION SHEET



|    |                            |                                 |          |                                                     |            |         |           |          |
|----|----------------------------|---------------------------------|----------|-----------------------------------------------------|------------|---------|-----------|----------|
| 24 | Capacitor<br>2.2uF 100V X7 | Resistive<br>element            | 0.00001  | Silicon Dioxide                                     | 7631-86-9  | 1.010   | 0.0000001 | 0.00001  |
|    |                            |                                 |          | Lead Oxide                                          | 1317-16-8  | 44.000  | 0.000003  |          |
|    |                            |                                 |          | Ruthenium oxide                                     | 12036-10-1 | 38.200  | 0.000002  |          |
|    |                            |                                 |          | Boron oxide                                         | 1303-86-2  | 15.000  | 0.000001  |          |
|    |                            |                                 |          | Antimony compounds                                  | Propietary | 1.880   | 0.0000001 |          |
|    |                            |                                 |          | Manganese Dioxide                                   | 1313-13-9  | 0.920   | 0.0000001 |          |
|    |                            | First Protective<br>Coating     | 0.00001  | Lead Oxide                                          | 1317-16-8  | 54.990  | 0.00001   | 0.00001  |
|    |                            |                                 |          | Silicon Dioxide                                     | 7631-86-9  | 25.600  | 0.000003  |          |
|    |                            |                                 |          | Boron Oxide                                         | 1303-86-2  | 12.900  | 0.000001  |          |
|    |                            |                                 |          | Zinc Oxide                                          | 1314-13-2  | 4.205   | 0.0000004 |          |
|    |                            |                                 |          | Chromium Oxide                                      | 1308-38-9  | 2.305   | 0.0000002 |          |
|    |                            | Second<br>Protective<br>Coating | 0.00002  | poly[(o-cresyl glycidyl ether)-<br>co-formaldehyde] | 29690-82-2 | 69.000  | 0.000007  | 0.00001  |
|    |                            |                                 |          | Silicon Dioxide                                     | 7631-86-9  | 23.000  | 0.000002  |          |
|    |                            |                                 |          | Carbon Black                                        | 1333-86-4  | 8.000   | 0.000001  |          |
|    |                            | Marking                         | 0.000002 | poly[(o-cresyl glycidyl ether)-<br>co-formaldehyde] | 29690-82-2 | 61.000  | 0.000001  | 0.000001 |
|    |                            |                                 |          | Silica gel                                          | 7631-86-9  | 30.500  | 0.0000004 |          |
|    |                            |                                 |          | Titanium dioxide                                    | 13463-67-7 | 8.500   | 0.0000001 |          |
|    |                            | Side Terminal                   | 0.00008  | Bisphenol A diglycidyl ethe                         | 25068-38-6 | 45.000  | 0.00003   | 0.0001   |
|    |                            |                                 |          | Silver                                              | 7440-22-4  | 45.000  | 0.00003   |          |
|    |                            |                                 |          | Carbon Black                                        | 1333-86-4  | 10.000  | 0.00001   |          |
|    |                            | Middle Terminal                 | 0.0001   | Nickel                                              | 7440-02-0  | 100.000 | 0.0001    | 0.0001   |
|    |                            | Outer Terminal                  | 0.00009  | Tin                                                 | 7440-31-5  | 100.000 | 0.0001    | 0.0001   |
| 24 | Capacitor<br>2.2uF 100V X7 | Dielectric                      | 0.04     | Barium titanate(IV)                                 | 12047-27-7 | 96.440  | 0.024     | 0.02     |
|    |                            |                                 |          | Terbium(III,IV) oxide                               | 12037-01-3 | 2.030   | 0.001     |          |
|    |                            |                                 |          | Others, not to declare                              | Propietary | 1.530   | 0.0004    |          |
|    |                            | Inner Electrode                 | 0.007    | Nickel                                              | 7440-02-0  | 100.000 | 0.005     | 0.00     |
|    |                            | Terminal<br>Electrode           | 0.003    | Copper                                              | 7440-50-8  | 100.000 | 0.002     | 0.002    |
|    |                            | Electro-plating                 | 0.0005   | Nickel                                              | 7440-02-0  | 51.000  | 0.0002    | 0.0004   |
|    |                            |                                 |          | Tin                                                 | 7440-31-5  | 49.000  | 0.0002    |          |

# MATERIAL DECLARATION SHEET



|    |                       |                          |          |                            |             |        |           |          |
|----|-----------------------|--------------------------|----------|----------------------------|-------------|--------|-----------|----------|
| 25 | Resistor 0 OHM Jumper | Substrate                | 0.002    | Aluminum Oxide             | 1344-28-1   | 96.000 | 0.001     | 0.001    |
|    |                       |                          |          | Crystalline silica, Quartz | 14808-60-7  | 3.000  | 0.00004   |          |
|    |                       |                          |          | Magnesium Oxide            | 1309-48-4   | 0.800  | 0.00001   |          |
|    |                       |                          |          | Others, not to declare     | Propietary  | 0.200  | 0.000003  |          |
|    |                       | Inner Electrode (Top)    | 0.00005  | Silver                     | 7440-22-4   | 91.500 | 0.00003   | 0.00003  |
|    |                       |                          |          | Palladium                  | 7440-05-3   | 2.500  | 0.000001  |          |
|    |                       |                          |          | Lead Monoxide              | 1317-36-8   | 2.000  | 0.000001  |          |
|    |                       |                          |          | Boric anhydride            | 1303-86-2   | 1.000  | 0.0000003 |          |
|    |                       |                          |          | Crystalline silica, Quartz | 14808-60-7  | 2.000  | 0.000001  |          |
|    |                       |                          |          | Others, not to declare     | Propietary  | 1.000  | 0.0000003 |          |
|    |                       | Inner Electrode (Bottom) | 0.00003  | Silver                     | 7440-22-4   | 92.000 | 0.00002   | 0.00002  |
|    |                       |                          |          | Lead Monoxide              | 1317-36-8   | 3.000  | 0.000001  |          |
|    |                       |                          |          | Boric anhydride            | 1303-86-2   | 2.000  | 0.0000005 |          |
|    |                       |                          |          | Crystalline silica, Quartz | 14808-60-7  | 2.000  | 0.0000005 |          |
|    |                       |                          |          | Others, not to declare     | Propietary  | 1.000  | 0.0000002 |          |
|    |                       | Inner Electrode (Side)   | 0.000001 | Nickel                     | 7440-02-0   | 50.000 | 0.0000003 | 0.000001 |
|    |                       |                          |          | Chromium                   | 7440-47-3   | 50.000 | 0.0000003 |          |
|    |                       | Resistive film           | 0.00002  | Silver                     | 7440-22-4   | 92.000 | 0.00001   | 0.00001  |
|    |                       |                          |          | Lead Monoxide              | 1317-36-8   | 3.000  | 0.0000003 |          |
|    |                       |                          |          | Boric anhydride            | 1303-86-2   | 2.000  | 0.0000002 |          |
|    |                       |                          |          | Crystalline silica, Quartz | 14808-60-7  | 2.000  | 0.0000002 |          |
|    |                       |                          |          | Others, not to declare     | Propietary  | 1.000  | 0.0000001 |          |
|    |                       | Inner Protective Coat    | 0.00001  | Lead Monoxide              | 1317-36-8   | 49.000 | 0.000004  | 0.00001  |
|    |                       |                          |          | Boric anhydride            | 1303-86-2   | 19.500 | 0.000002  |          |
|    |                       |                          |          | Crystalline silica, Quartz | 14808-60-7  | 29.500 | 0.000003  |          |
|    |                       |                          |          | Others, not to declare     | Propietary  | 2.000  | 0.0000002 |          |
|    |                       | Outer Protective Coat    | 0.00003  | Epoxy Resin                | 129915-35-1 | 59.000 | 0.00001   | 0.00002  |
|    |                       |                          |          | Crystalline silica, Quartz | 14808-60-7  | 7.000  | 0.000002  |          |
|    |                       |                          |          | Copper(II) oxide           | 1317-38-0   | 8.800  | 0.000002  |          |
|    |                       |                          |          | Chromium(III) oxide        | 1308-38-9   | 18.000 | 0.000004  |          |

# MATERIAL DECLARATION SHEET



|    |                                   |                          |           |                                                 |             |         |            |           |
|----|-----------------------------------|--------------------------|-----------|-------------------------------------------------|-------------|---------|------------|-----------|
|    |                                   |                          |           | Manganese(IV) oxide                             | 1313-13-9   | 3.000   | 0.000001   |           |
|    |                                   |                          |           | Others, not to declare                          | Propietary  | 4.200   | 0.000001   |           |
|    |                                   | Marking                  | 0.000008  | Epoxy Resin                                     | 129915-35-1 | 67.000  | 0.000004   | 0.00001   |
|    |                                   |                          |           | Crystalline silica, Quartz                      | 14808-60-7  | 10.000  | 0.000001   |           |
|    |                                   |                          |           | Titanium(IV) oxide                              | 13463-67-7  | 20.000  | 0.000001   |           |
|    |                                   |                          |           | Others, not to declare                          | Propietary  | 3.000   | 0.0000002  |           |
|    |                                   | Plating                  | 0.000008  | Nickel                                          | 7440-02-0   | 100.000 | 0.0001     | 0.0001    |
|    |                                   | Solder Plating           | 0.000007  | Tin                                             | 7440-31-5   | 100.000 | 0.00005    | 0.00005   |
|    |                                   | Ceramic Substrate        | 0.00175   | Aluminum Oxide                                  | 1344-28-1   | 96.000  | 0.001      | 0.001     |
|    |                                   |                          |           | Silicon oxide                                   | 7631-86-9   | 3.000   | 0.00004    |           |
|    |                                   |                          |           | Magnesium Oxide                                 | 1309-48-4   | 1.000   | 0.00001    |           |
| 26 | Resistor 10K<br>OHM 0.1%<br>1/16W | Inner termination layer  | 0.000044  | Silver                                          | 7440-22-4   | 90.000  | 0.00003    | 0.00003   |
|    |                                   |                          |           | Terpineol                                       | 8000-41-7   | 10.000  | 0.000003   |           |
|    |                                   | Resistive element        | 0.0000119 | Nickel                                          | 7440-02-0   | 55.000  | 0.000005   | 0.00001   |
|    |                                   |                          |           | Chromium                                        | 7740-47-3   | 45.000  | 0.000004   |           |
|    |                                   | Over-coat                | 0.000035  | 2,2,4-trimethyl-1,3-pentanediol monoisobutyrate | 25265-77-4  | 45.000  | 0.00001    | 0.00002   |
|    |                                   |                          |           | Carbon Black                                    | 1333-86-4   | 3.000   | 0.000001   |           |
|    |                                   |                          |           | Silicon Dioxide                                 | 60676-86-0  | 25.000  | 0.00001    |           |
|    |                                   |                          |           | Talc                                            | 14807-96-6  | 15.000  | 0.000004   |           |
|    |                                   |                          |           | Diethylene glycol monobutyl ether               | 112-34-5    | 12.000  | 0.000003   |           |
|    |                                   | Marking                  | 0.00001   | Ethyl cellulose                                 | 9004-57-3   | 80.000  | 0.00001    | 0.00001   |
|    |                                   |                          |           | Pigment                                         | 13463-67-7  | 20.000  | 0.000001   |           |
|    |                                   | Side Termination layer   | 0.0000001 | Nickel                                          | 7440-02-0   | 55.000  | 0.00000004 | 0.0000001 |
|    |                                   |                          |           | Chromium                                        | 7440-47-3   | 45.000  | 0.00000003 |           |
|    |                                   | Middle termination layer | 0.000005  | Nickel                                          | 7440-02-0   | 100.000 | 0.000003   | 0.000003  |
|    |                                   | Outer Termination layer  | 0.000009  | Tin                                             | 7440-31-5   | 100.000 | 0.00001    | 0.00001   |

# MATERIAL DECLARATION SHEET



|    |                                    |                     |         |                       |            |         |           |         |
|----|------------------------------------|---------------------|---------|-----------------------|------------|---------|-----------|---------|
| 27 | Screw x2                           | Stainless Steel 304 | 0.513   | Carbon                | 7440-44-0  | 0.080   | 0.0003    | 0.35    |
|    |                                    |                     |         | Manganese             | 7439-96-5  | 2.000   | 0.01      |         |
|    |                                    |                     |         | Phosphorus            | 7723-14-0  | 0.045   | 0.0002    |         |
|    |                                    |                     |         | Sulfur                | 7704-34-9  | 0.030   | 0.0001    |         |
|    |                                    |                     |         | Silicon               | 7440-21-3  | 0.750   | 0.003     |         |
|    |                                    |                     |         | Chromium              | 7440-47-3  | 18.000  | 0.06      |         |
|    |                                    |                     |         | Nickel                | 7440-02-0  | 8.000   | 0.03      |         |
|    |                                    |                     |         | Iron                  | 7439-89-6  | 71.095  | 0.25      |         |
| 28 | Top Housing                        | Resin               | 9.918   | Polyphenylene Sulfide | 26125-40-6 | 59.500  | 4.08      | 6.8529  |
|    |                                    |                     |         | Glass Fiber           | 65997-17-3 | 40.000  | 2.74      |         |
|    |                                    |                     |         | Carbon Black          | 1333-86-4  | 0.500   | 0.03      |         |
| 29 | Bottom Housing                     | Resin               | 9.358   | Polyphenylene Sulfide | 26125-40-6 | 59.500  | 3.85      | 6.4660  |
|    |                                    |                     |         | Glass Fiber           | 65997-17-3 | 40.000  | 2.59      |         |
|    |                                    |                     |         | Carbon Black          | 1333-86-4  | 0.500   | 0.03      |         |
| 30 | Shunt                              | Manganin            | 9.891   | Copper                | 7440-50-8  | 86.000  | 5.88      | 6.83    |
|    |                                    |                     |         | Manganese             | 7439-96-5  | 12.000  | 0.82      |         |
|    |                                    |                     |         | Nickel                | 7440-02-0  | 2.000   | 0.14      |         |
|    |                                    | Plating             | 0.005   | Nickel                | 7440-02-0  | 100.000 | 0.003     | 0.003   |
|    |                                    | Copper Alloy        | 98.655  | Copper                | 7440-50-8  | 99.950  | 68.133    | 68.17   |
|    |                                    |                     |         | Oxygen                | 7782-44-7  | 0.050   | 0.034     |         |
| 31 | Resistor SMD<br>3.3 OHM 5%<br>0.4W | Substrate           | 0.004   | Aluminum Oxide        | 1344-28-1  | 96.900  | 0.003     | 0.003   |
|    |                                    |                     |         | Silicon Dioxide       | 7631-86-9  | 2.100   | 0.00006   |         |
|    |                                    |                     |         | Magnesium Oxide       | 1309-48-4  | 1.000   | 0.00003   |         |
|    |                                    | Electrode 1         | 0.00004 | Silver                | 7440-22-4  | 80.000  | 0.00002   | 0.00003 |
|    |                                    |                     |         | Glass                 | 65997-18-4 | 10.400  | 0.000003  |         |
|    |                                    |                     |         | Lead Oxide            | 1317-36-8  | 3.200   | 0.000001  |         |
|    |                                    |                     |         | Bismuth Oxide         | 1304-76-3  | 4.000   | 0.000001  |         |
|    |                                    |                     |         | Copper Oxide          | 1317-39-1  | 2.400   | 0.000001  |         |
|    |                                    | Electrode 2         | 0.00008 | Silver                | 7440-22-4  | 94.480  | 0.0000    | 0.0001  |
|    |                                    |                     |         | Glass                 | 65997-18-4 | 4.740   | 0.000002  |         |
|    |                                    |                     |         | Lead Oxide            | 1317-36-8  | 0.530   | 0.0000003 |         |

# MATERIAL DECLARATION SHEET



|    |                   |                    |          |                                 |            |         |           |          |
|----|-------------------|--------------------|----------|---------------------------------|------------|---------|-----------|----------|
|    |                   | Under coat         | 0.00005  | Boron Oxide                     | 1303-86-2  | 0.250   | 0.0000001 | 0.00004  |
|    |                   |                    |          | Glass                           | 65997-18-4 | 29.900  | 0.00001   |          |
|    |                   |                    |          | Lead Oxide                      | 1317-36-8  | 59.650  | 0.00002   |          |
|    |                   |                    |          | Boron Oxide                     | 1303-86-2  | 8.210   | 0.000003  |          |
|    |                   | Over coat          | 0.00006  | Chrome (III) oxide              | 1308-38-9  | 2.240   | 0.000001  | 0.00004  |
|    |                   |                    |          | Epoxy Resin                     | Propietary | 47.690  | 0.00002   |          |
|    |                   |                    |          | Silicone dioxide                | 7631-86-9  | 48.820  | 0.00002   |          |
|    |                   |                    |          | Manganese oxide                 | 1313-13-9  | 1.010   | 0.0000004 |          |
|    |                   | Marking            | 0.000004 | Chrome (III) oxide              | 1308-38-9  | 2.480   | 0.000001  | 0.000003 |
|    |                   |                    |          | Epoxy Resin                     | Propietary | 36.100  | 0.000001  |          |
|    |                   | Side electrode     | 0.0004   | Silicone dioxide                | 7631-86-9  | 63.900  | 0.000002  | 0.00003  |
|    |                   |                    |          | Silver                          | 7440-22-4  | 83.220  | 0.0002    |          |
|    |                   |                    |          | Glass                           | 65997-18-4 | 6.400   | 0.00002   |          |
|    |                   | Middle electrode   | 0.0002   | Epoxy Resin                     | Propietary | 10.380  | 0.00003   | 0.0001   |
|    |                   |                    |          | Nickel                          | 7440-02-0  | 100.000 | 0.0001    |          |
|    |                   | External electrode | 0.0001   | Tin                             | 7440-31-5  | 100.000 | 0.0001    | 0.0001   |
| 32 | Solder Preform x4 | Tin-Silver         | 0.104    | Tin                             | 7440-31-5  | 96.500  | 0.069     | 0.072    |
|    |                   |                    |          | Silver                          | 7440-22-4  | 3.500   | 0.003     |          |
| 33 | Adhesive          | Silicone           | 0.8      | Limestone                       | 1317-65-3  | 90.000  | 0.497     | 0.553    |
|    |                   |                    |          | Trimethoxyvinylsilane           | 2768-02-7  | 5.000   | 0.028     |          |
|    |                   |                    |          | 3-(Trimethoxysilyl) propylamine | 13822-56-5 | 4.000   | 0.022     |          |
|    |                   |                    |          | Quartz (SiO2)                   | 14808-60-7 | 1.000   | 0.006     |          |
| 34 | PCB Multilayer    | Copper Alloy       | 5.4500   | Copper                          | 7440-50-8  | 100.000 | 3.766     | 3.766    |
|    |                   | Conformal Coating  | 0.0039   | Epoxy Resin                     | 26265-08   | 45.000  | 0.001     | 0.003    |
|    |                   |                    |          | Glass Fiber                     | 26265-08-7 | 45.000  | 0.001     |          |
|    |                   |                    |          | Silicon dioxide                 | 65997-17-3 | 10.000  | 0.0003    |          |
| 35 | Conformal coating | Coating Silica     | 0.7000   | Dichlorodimethyl                | 68611-44-9 | 97.000  | 0.469     | 0.484    |
|    |                   |                    |          | Aminopropyltriethoxysilane      | 919-30-2   | 3.000   | 0.015     |          |

# MATERIAL DECLARATION SHEET



|    |                         |                    |        |                             |              |         |           |         |
|----|-------------------------|--------------------|--------|-----------------------------|--------------|---------|-----------|---------|
| 36 | Diode 80V<br>0.5A 17 x2 | Die Doped Silicon  | 0.0004 | Silicon                     | 7440-21-3    | 100.000 | 0.0003    | 0.0003  |
|    |                         | Lead Frame         | 0.0048 | Iron                        | 7439-89-6    | 57.650  | 0.002     | 0.003   |
|    |                         |                    |        | Nickel                      | 7440-02-0    | 41.000  | 0.001     |         |
|    |                         |                    |        | Manganese                   | 7439-96-5    | 0.600   | 0.00002   |         |
|    |                         |                    |        | Chromium                    | 7440-47-3    | 0.100   | 0.000003  |         |
|    |                         |                    |        | Cobalt                      | 7440-48-4    | 0.500   | 0.00002   |         |
|    |                         |                    |        | Silicon                     | 7440-21-3    | 0.150   | 0.000005  |         |
|    |                         | Lead Frame plating | 0.0002 | Silver                      | 7440-22-4    | 100.000 | 0.0001    | 0.0001  |
|    |                         | Wire Bonding       | 0.0001 | Gold                        | 7440-57-5    | 100.000 | 0.00007   | 0.00007 |
|    |                         | Molding Compound   | 0.0132 | Silicon Dioxide             | 7631-86-9    | 83.000  | 0.008     | 0.009   |
|    |                         |                    |        | Zinc Oxide                  | 1314-13-2    | 1.000   | 0.00009   |         |
|    |                         |                    |        | Phenol-formaldehyde polymer | 9003-35-4    | 10.000  | 0.0009    |         |
|    |                         |                    |        | Boron zinc hydroxide oxide  | 138265-88-0  | 5.000   | 0.0005    |         |
|    |                         |                    |        | Carbon black                | 1333-86-4    | 1.000   | 0.00009   |         |
|    |                         | Die Attach Epoxy   | 0.0017 | Silver                      | 7440-22-4    | 75.000  | 0.0009    | 0.001   |
|    |                         |                    |        | Epoxy resin                 | Trade secret | 25.000  | 0.0003    |         |
|    |                         | Tin Plating        | 0.0004 | Tin                         | 7440-31-5    | 100.000 | 0.0003    | 0.0003  |
| 37 | Diode TVS               | Encapsulation      | 0.0051 | Silica, vitreous            | 60676-86-0   | 87.600  | 0.003     | 0.004   |
|    |                         |                    |        | Epoxy Resin A               | Proprietary  | 4.900   | 0.0002    |         |
|    |                         |                    |        | Epoxy cresol novolac        | 29690-82-2   | 4.000   | 0.0001    |         |
|    |                         |                    |        | Phenol resin                | Proprietary  | 3.000   | 0.0001    |         |
|    |                         |                    |        | Carbon Black                | 1333-86-4    | 0.500   | 0.0000    |         |
|    |                         | Leadframe          | 0.0039 | Copper                      | 7440-50-8    | 97.100  | 0.0026    | 0.003   |
|    |                         |                    |        | Iron                        | 7439-89-6    | 2.289   | 0.0001    |         |
|    |                         |                    |        | Phosphorus                  | 7723-14-0    | 0.020   | 0.000001  |         |
|    |                         |                    |        | Zinc                        | 7440-66-6    | 0.100   | 0.000003  |         |
|    |                         |                    |        | Lead                        | 7439-92-1    | 0.010   | 0.0000003 |         |

# MATERIAL DECLARATION SHEET



|    |                              |                    |          |                                 |             |         |           |           |
|----|------------------------------|--------------------|----------|---------------------------------|-------------|---------|-----------|-----------|
|    |                              | Chip               | 0.0007   | Silver                          | 7440-22-4   | 0.481   | 0.000013  | 0.0005    |
|    |                              |                    |          | Silicon                         | 7440-21-3   | 90.684  | 0.0005    |           |
|    |                              |                    |          | Nickel                          | 7440-02-0   | 6.067   | 0.00003   |           |
|    |                              |                    |          | Aluminum                        | 7429-90-5   | 2.874   | 0.00001   |           |
|    |                              |                    |          | Gold                            | 7440-57-5   | 0.376   | 0.0000    |           |
|    |                              | Die Attach         | 0.0002   | Silver                          | 7440-22-4   | 75.000  | 0.0001    | 0.0002    |
|    |                              |                    |          | Epoxy Resin                     | 9003-36-5   | 19.900  | 0.00003   |           |
|    |                              |                    |          | 1,4-Butanediol diglycidyl ether | 2425-79-8   | 3.000   | 0.00001   |           |
|    |                              |                    |          | Aromatic polyamine              | Proprietary | 2.000   | 0.000003  |           |
|    |                              |                    |          | Adipic acid                     | 124-04-9    | 0.100   | 0.0000002 |           |
|    |                              | Bond wires         | 0.00002  | Copper                          | 7440-50-8   | 98.700  | 0.0000164 | 0.00002   |
|    |                              |                    |          | Non - Cu element                | Proprietary | 1.300   | 0.0000002 |           |
|    |                              | Terminal Finish    | 0.0001   | Tin                             | 7440-31-5   | 100.000 | 0.0000553 | 0.0001    |
| 38 | Resistor SMD<br>2.26K OHM    | Inner Electrode    | 0.0002   | Nickel                          | 7440-02-0   | 48.700  | 0.00008   | 0.0002    |
|    |                              |                    |          | Copper                          | 7440-50-8   | 49.390  | 0.00008   |           |
|    |                              |                    |          | Tin                             | 7440-31-5   | 1.910   | 0.000003  |           |
|    |                              | Protective Film    | 0.0009   | Silicon Dioxide                 | 7631-86-9   | 66.000  | 0.0004    | 0.001     |
|    |                              |                    |          | Misc. not to declare            | Proprietary | 34.000  | 0.0002    |           |
|    |                              | External Electrode | 0.0002   | Tin                             | 7440-31-5   | 100.000 | 0.0001    | 0.0001    |
|    |                              | Ceramic            | 0.0036   | Aluminum Oxide                  | 1344-28-1   | 99.500  | 0.0025    | 0.002     |
|    |                              |                    |          | Silicon Dioxide                 | 14808-60-7  | 0.300   | 0.00001   |           |
|    |                              |                    |          | Magnesium Oxide                 | 1309-48-4   | 0.200   | 0.00000   |           |
|    |                              | Resistive element  | 0.000001 | Nickel                          | 7440-02-0   | 80.000  | 0.0000003 | 0.0000004 |
|    |                              |                    |          | Chromium                        | 7440-47-3   | 20.000  | 0.0000001 |           |
|    |                              | Marking            | 0.00002  | Silicon Dioxide                 | 7631-86-9   | 100.000 | 0.0000104 | 0.00001   |
| 39 | Resistor 1.2M<br>OHM 0.1% x8 | Inner Electrode    | 0.0019   | Nickel                          | 7440-02-0   | 48.700  | 0.0006299 | 0.0013    |
|    |                              |                    |          | Copper                          | 7440-50-8   | 49.390  | 0.0006388 |           |
|    |                              |                    |          | Tin                             | 7440-31-5   | 1.910   | 0.0000247 |           |
|    |                              | Protective Film    | 0.0070   | Silicon Dioxide                 | 7631-86-9   | 66.000  | 0.0032    | 0.005     |
|    |                              |                    |          | Misc. not to declare            | Proprietary | 34.000  | 0.0017    |           |

# MATERIAL DECLARATION SHEET



|    |                    |                                 |          |                                                           |            |         |           |           |
|----|--------------------|---------------------------------|----------|-----------------------------------------------------------|------------|---------|-----------|-----------|
| 40 |                    | External Electrode              | 0.0012   | Tin                                                       | 7440-31-5  | 100.000 | 0.0008    | 0.0008    |
|    |                    | Ceramic                         | 0.03     | Aluminum Oxide                                            | 1344-28-1  | 99.500  | 0.0199    | 0.020     |
|    |                    |                                 |          | Silicon Dioxide                                           | 14808-60-7 | 0.300   | 0.0001    |           |
|    |                    |                                 |          | Magnesium Oxide                                           | 1309-48-4  | 0.200   | 0.00004   |           |
|    |                    | Resistive element               | 0.000005 | Nickel                                                    | 7440-02-0  | 80.000  | 0.0000027 | 0.0000033 |
|    |                    |                                 |          | Chromium                                                  | 7440-47-3  | 20.000  | 0.0000007 |           |
|    |                    | Marking                         | 0.00012  | Silicon Dioxide                                           | 7631-86-9  | 100.000 | 0.00008   | 0.00008   |
|    | Power Transformers | Header filled thermoplastics.   | 0.058    | Aluminum hydroxide                                        | 21645-51-2 | 40.000  | 0.02      | 0.04      |
|    |                    |                                 |          | Glass fiber                                               | 65997-17-3 | 30.000  | 0.01      |           |
|    |                    |                                 |          | Diallyl phthalate resin                                   | 25035-78-3 | 25.000  | 0.01      |           |
|    |                    |                                 |          | Antimonyoxide (Sb <sub>2</sub> O <sub>3</sub> )           | 1309-64-4  | 4.500   | 0.002     |           |
|    |                    |                                 |          | Carbon black                                              | 1333-86-4  | 0.500   | 0.0002    |           |
|    |                    | Terminal copper alloys          | 0.0077   | Copper                                                    | 7440-50-8  | 93.450  | 0.0050    | 0.005     |
|    |                    |                                 |          | Tin                                                       | 7440-31-5  | 6.050   | 0.0003    |           |
|    |                    |                                 |          | Phosphorus                                                | 7723-14-0  | 0.350   | 0.00002   |           |
|    |                    |                                 |          | Zinc                                                      | 7440-66-6  | 0.100   | 0.00001   |           |
|    |                    |                                 |          | Iron                                                      | 7439-89-6  | 0.050   | 0.000003  |           |
|    |                    | Terminal Plating Special metals | 0.0004   | Nickel                                                    | 7440-02-0  | 34.000  | 0.0001    | 0.0003    |
|    |                    |                                 |          | Tin                                                       | 7440-31-5  | 66.000  | 0.0002    |           |
|    |                    | Ceramics/glass                  | 0.015    | Ironoxide                                                 | 1317-61-9  | 70.000  | 0.007     | 0.01      |
|    |                    |                                 |          | Manganesoxide                                             | 1317-35-7  | 17.000  | 0.002     |           |
|    |                    |                                 |          | Zincoxide                                                 | 1314-13-2  | 13.000  | 0.001     |           |
|    |                    | Wire Copper                     | 0.0036   | Copper                                                    | 7440-50-8  | 98.700  | 0.00      | 0.002     |
|    |                    |                                 |          | Tin                                                       | 7440-31-5  | 1.300   | 0.0000    |           |
|    |                    | Wire Lacquers                   | 0.0003   | Poly(tetrafluoroethylene-co-perfluoro(propylvinyl ether)) | 26655-00-5 | 100.000 | 0.0002    | 0.0002    |
|    |                    | Solder                          | 0.0042   | Tin                                                       | 7440-31-5  | 96.000  | 0.003     | 0.0029    |
|    |                    |                                 |          | Silver                                                    | 7440-22-4  | 4.000   | 0.0001    |           |
|    |                    | Core Coating                    | 0.0002   | Paracyclophane                                            | 1633-22-3  | 99.000  | 0.0001    | 0.0001    |
|    |                    |                                 |          | Trade secret                                              | N/A        | 1.000   | 0.000001  |           |

# MATERIAL DECLARATION SHEET



|    |                  |                                              |         |                                        |                 |         |          |         |
|----|------------------|----------------------------------------------|---------|----------------------------------------|-----------------|---------|----------|---------|
|    |                  | Wire Copper<br>In cable<br>harnesses         | 0.002   | Copper                                 | 7440-50-8       | 100.000 | 0.001    | 0.001   |
|    |                  | Wire Lacquers                                | 0.0003  | Polyurethane                           | 9009-54-5       | 94.400  | 0.0002   | 0.0002  |
|    |                  |                                              |         | Polyamide resin                        | 70024-79-2      | 5.600   | 0.00001  |         |
|    |                  | Wire Copper<br>Alloy                         | 0.0014  | Copper                                 | 7440-50-8       | 100.000 | 0.001    | 0.001   |
|    |                  | Wire Tin Plating                             | 0.00004 | Tin                                    | 7440-31-5       | 100.000 | 0.00003  | 0.00003 |
|    |                  | Wire Isolation<br>Lacquers                   | 0.0015  | polymer with<br>tetrafluoroethene      | 26655-00-5      | 99.580  | 0.001    | 0.001   |
|    |                  |                                              |         | C.I. Pigment Blue 28                   | 1345-16-0       | 0.180   | 0.000002 |         |
|    |                  |                                              |         | Titanium oxide (TiO2)                  | 13463-67-7      | 0.180   | 0.000002 |         |
|    |                  |                                              |         | C.I. Pigment Green 50                  | 68186-85-6      | 0.060   | 0.000001 |         |
|    |                  | Wire Isolation<br>Copper Alloy               | 0.0009  | Copper                                 | 7440-50-8       | 97.950  | 0.0006   | 0.001   |
|    |                  |                                              |         | Tin                                    | 7440-31-5       | 2.050   | 0.00001  |         |
|    |                  | Adhesive<br>Sealants                         | 0.0024  | Bisphenol A Di glycidyl ether<br>resin | 25068-38-6      | 50.000  | 0.0008   | 0.002   |
|    |                  |                                              |         | Talc                                   | 14807-96-6      | 14.000  | 0.0002   |         |
|    |                  |                                              |         | Crystalline silica                     | 14808-60-7      | 10.000  | 0.0002   |         |
|    |                  |                                              |         | Titanium oxide (TiO2)                  | 13463-67-7      | 1.000   | 0.00002  |         |
|    |                  |                                              |         | Limestone                              | 1317-65-3       | 25.000  | 0.0004   |         |
|    |                  | Wire Copper<br>amounts in<br>cable harnesses | 0.0021  | Copper                                 | 7440-50-8       | 100.000 | 0.0014   | 0.001   |
|    |                  | Wire Lacquers                                | 0.0001  | Polyurethane                           | 9009-54-5       | 100.000 | 0.0001   | 0.0001  |
| 41 | MOSFETs P-<br>CH | Bond Wire                                    | 0.00002 | Copper                                 | 7440-50-8       | 100.000 | 0.00001  | 0.00001 |
|    |                  | Die                                          | 0.00099 | Aluminum                               | 7429-90-5       | 1.010   | 0.00001  | 0.001   |
|    |                  |                                              |         | Doped Silicon                          | 7440-21-3       | 98.990  | 0.0007   |         |
|    |                  | Die Attach<br>Adhesive                       | 0.00003 | Proprietary Resin                      | 129915-35-<br>1 | 33.330  | 0.00001  | 0.00002 |
|    |                  |                                              |         | Silver                                 | 7440-22-4       | 66.670  | 0.00001  |         |
|    |                  | Lead frame                                   | 0.00402 | Copper                                 | 7440-50-8       | 99.480  | 0.002764 | 0.003   |
|    |                  |                                              |         | Iron                                   | 7439-89-6       | 0.250   | 0.000007 |         |

# MATERIAL DECLARATION SHEET



|    |                               |                         |          |                      |                 |         |          |         |
|----|-------------------------------|-------------------------|----------|----------------------|-----------------|---------|----------|---------|
|    |                               |                         |          | Phosphorus           | 7723-14-0       | 0.020   | 0.000001 |         |
|    |                               |                         |          | Zinc                 | 7440-66-6       | 0.250   | 0.000007 |         |
|    |                               | Mold Compound           | 0.006    | Epoxy Resin          | 29690-82-2      | 8.000   | 0.0003   | 0.004   |
|    |                               |                         |          | Fused Silica         | 60676-86-0      | 76.870  | 0.003    |         |
|    |                               |                         |          | Metal Hydroxide      | 21645-51-2      | 8.000   | 0.0003   |         |
|    |                               |                         |          | Phenol Resin         | 9003-35-4       | 7.130   | 0.0003   |         |
|    |                               | Solder Plating          | 0.0001   | Tin                  | 7440-31-5       | 100.000 | 0.0001   | 0.0001  |
| 42 | Thermistors<br>NTC 10KOHM     | Ceramic<br>element      | 0.0040   | Manganese oxide      | 1317-35-7       | 50.000  | 0.001    | 0.003   |
|    |                               |                         |          | Nickel monoxide      | 1313-99-1       | 25.000  | 0.001    |         |
|    |                               |                         |          | Iron(III) oxide      | 1309-37-1       | 15.000  | 0.0004   |         |
|    |                               |                         |          | Misc. not to declare | Trade<br>secret | 10.000  | 0.0003   |         |
|    |                               | Nickel plating          | 0.00003  | Nickel               | 7440-02-0       | 100.000 | 0.00002  | 0.00002 |
|    |                               | Tin Plating             | 0.0001   | Tin                  | 7440-31-5       | 100.000 | 0.0001   | 0.0001  |
|    |                               | Inner electrode         | 0.0002   | Silver               | 7440-22-4       | 70.000  | 0.0001   | 0.0001  |
|    |                               |                         |          | Palladium            | 7440-05-3       | 30.000  | 0.00003  |         |
|    |                               | Outer electrode         | 0.0004   | Copper               | 7440-50-8       | 89.000  | 0.0003   | 0.0003  |
|    |                               |                         |          | Silicon dioxide      | 7631-86-9       | 8.000   | 0.00002  |         |
|    |                               |                         |          | Diboron trioxid      | 1303-86-2       | 3.000   | 0.00001  |         |
| 43 | Crystal<br>16.0000MHZ<br>10PF | Package -<br>Ceramics   | 0.011648 | Aluminum oxide       | 1344-28-1       | 90.00   | 0.0072   | 0.008   |
|    |                               |                         |          | Silicon oxide        | 7631-86-9       | 6.00    | 0.0005   |         |
|    |                               |                         |          | Chromium oxide       | 1308-38-9       | 2.00    | 0.0002   |         |
|    |                               |                         |          | Molybdenum           | 7439-98-7       | 2.00    | 0.0002   |         |
|    |                               | Package - Kovar         | 0.0003   | Iron                 | 7439-89-6       | 53.00   | 0.0001   | 0.0002  |
|    |                               |                         |          | Nickel               | 7440-02-0       | 29.00   | 0.0001   |         |
|    |                               |                         |          | Cobalt               | 7440-48-4       | 18.00   | 0.00003  |         |
|    |                               | Package - Plate         | 0.0004   | Gold                 | 7440-57-5       | 19.00   | 0.00005  | 0.0003  |
|    |                               |                         |          | Nickel               | 7440-02-0       | 81.00   | 0.00021  |         |
|    |                               | Package-<br>Metallizing | 0.0001   | Tungsten             | 7440-33-7       | 100.00  | 0.00009  | 0.0001  |
|    |                               | Package- Solder         | 0.0004   | Silver               | 7440-22-4       | 71.00   | 0.00019  | 0.0003  |
|    |                               |                         |          | Copper               | 7440-50-8       | 29.00   | 0.00008  |         |

# MATERIAL DECLARATION SHEET



|                |              |                             |           |                               |            |        |          |          |
|----------------|--------------|-----------------------------|-----------|-------------------------------|------------|--------|----------|----------|
|                |              | Lid - Kovar                 | 0.00319   | Iron                          | 7439-89-6  | 53.24  | 0.00117  | 0.002    |
|                |              |                             |           | Nickel                        | 7440-02-0  | 29.00  | 0.00064  |          |
|                |              |                             |           | Cobalt                        | 7440-48-4  | 17.00  | 0.00037  |          |
|                |              |                             |           | Manganese                     | 7439-96-5  | 0.50   | 0.00001  |          |
|                |              |                             |           | Silicon                       | 7440-21-3  | 0.20   | 0.000004 |          |
|                |              |                             |           | Carbon                        | 7440-44-0  | 0.06   | 0.000001 |          |
|                |              | Lid - Plating               | 0.00029   | Nickel                        | 7440-02-0  | 100.00 | 0.0002   | 0.0002   |
|                |              | Quartz                      | 0.00063   | Silicon dioxide               | 14808-60-7 | 100.00 | 0.0004   | 0.0004   |
|                |              | Electrode Cr target         | 0.000002  | Chromium                      | 7440-47-3  | 100.00 | 0.000001 | 0.000001 |
|                |              | Electrode Ag target         | 0.000037  | Silver                        | 7440-22-4  | 100.00 | 0.000026 | 0.00003  |
|                |              | Conductive Adhesive         | 0.0000346 | Silver                        | 7440-22-4  | 77.08  | 0.000018 | 0.00002  |
|                |              |                             |           | Silica                        | 7631-86-9  | 8.33   | 0.000002 |          |
| Silicone Resin | 68554-70-1   |                             |           | 14.59                         | 0.000003   |        |          |          |
| 44             | Silicone     | SS-5600 Part A              | 0.8       | Dimethyl Silicone Resin       | 63148-62-9 | 44.03  | 0.243384 | 0.55277  |
|                |              |                             |           | 3-Aminopropyltrimethoxysilane | 13822-56-5 | 5.25   | 0.029020 |          |
|                |              |                             |           | Hexamethyldisiloxane          | 107-46-0   | 2.40   | 0.013266 |          |
|                |              |                             |           | Quartz                        | 14808-60-7 | 35.03  | 0.193635 |          |
|                |              |                             |           | Silicon Dioxide               | 7631-86-9  | 13.29  | 0.073463 |          |
| 45             | Silicone     | SS-5600 Part B              | 0.8       | Dimethyl Silicone Resin       | 63148-62-9 | 47.45  | 0.262289 | 0.55277  |
|                |              |                             |           | Quartz                        | 14808-60-7 | 35.56  | 0.196564 |          |
|                |              |                             |           | Silicon Dioxide               | 7631-86-9  | 16.93  | 0.093584 |          |
|                |              |                             |           | Dibutyltin dilaurate          | 77-58-7    | 0.06   | 0.000332 |          |
| 46             | Solder Paste | Solder Paste, 96.5 Sn/3.5Ag | 0.003     | Tin                           | 7440-31-5  | 86     | 0.001783 | 0.00207  |
|                |              |                             |           | Silver                        | 7440-22-4  | 5      | 0.000104 |          |
|                |              |                             |           | Rosin                         | 65997-06-0 | 5      | 0.000104 |          |
|                |              |                             |           | 2-ethylhexane-1,3-diol        | 94-96-2    | 3      | 0.000062 |          |
|                |              |                             |           | Misc, not to declare          | --         | 1      | 0.000021 |          |
| 47             | Solder       | Lead Free Solder            | 0.02      | Tin                           | 7440-31-5  | 88     | 0.0122   | 0.01382  |
|                |              |                             |           | Silver                        | 7440-22-4  | 7      | 0.0010   |          |

# MATERIAL DECLARATION SHEET



|  |  |              |         |        |           |   |        |  |
|--|--|--------------|---------|--------|-----------|---|--------|--|
|  |  |              |         | Copper | 7440-50-8 | 5 | 0.0007 |  |
|  |  | Total Weight | 144.726 |        |           |   |        |  |

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## Important remarks:

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