

# Material Declaration

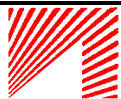


|                  |             |
|------------------|-------------|
| Package Type     | Plastic     |
| Package Size     | 14 x 9.8 mm |
| Terminal Finish  | Matte Tin   |
| Finish Thickness | 8 microns   |
| Weight (mg)      | 1050        |
| MSL              | 2           |

|        |               |
|--------|---------------|
| Series | CPP-M-Plastic |
|--------|---------------|

| Item      | Material      | Element  | Content (mg) | Content (wt%) | CAS #      |           |
|-----------|---------------|--|--------------|---------------|------------|-----------|
| Cover     | Kovar         | Nickel (Ni)                                      | 0.658        | 0.063%        | 7440-02-0  |           |
|           |               | Cobalt (Co)                                      | 0.383        | 0.036%        | 7440-48-4  |           |
|           |               | Iron (Fe)  | 1.230        | 0.117%        | 7439-89-6  |           |
| Base      | Ceramic       | Alumina (Al <sub>2</sub> O <sub>3</sub> )        | 8.395        | 0.800%        | 1344-28-1  |           |
|           |               | Silicon Dioxide (SiO <sub>2</sub> )              | 0.334        | 0.032%        | 14808-60-7 |           |
|           |               | Chromium Oxide (Cr <sub>2</sub> O <sub>3</sub> ) | 0.358        | 0.034%        | 1308-38-9  |           |
|           |               | Titanium Oxide (TiO <sub>2</sub> )               | 0.093        | 0.009%        | 13463-67-7 |           |
|           |               | Calcium Oxide (CaO)                              | 0.032        | 0.003%        | 1305-79-9  |           |
|           |               | Magnesium Oxide (MgO)                            | 0.046        | 0.004%        | 1309-48-4  |           |
|           |               | Tungsten (W)                                     | 1.273        | 0.121%        | 7440-33-7  |           |
|           | Seal Ring     |  | Nickel (Ni)  | 0.497         | 0.047%     | 7440-02-0 |
|           |               |  | Gold (Au)    | 0.057         | 0.005%     | 7440-57-5 |
|           |               |  | Iron (Fe)    | 0.621         | 0.059%     | 7439-89-6 |
|           |               |  | Cobalt (Co)  | 0.236         | 0.023%     | 7440-48-4 |
|           | Silver Solder |  | Silver (Ag)  | 0.182         | 0.017%     | 7440-22-4 |
|           |               |  | Copper (Cu)  | 0.032         | 0.003%     | 7440-50-8 |
| Leadframe |               | Copper (Cu)                                      | 47.422       | 4.516%        | 7440-50-8  |           |
|           |               | Tin (Sn)   | 0.829        | 0.079%        | 7440-31-5  |           |
|           |               | Zinc (Zn)  | 0.007        | 0.001%        | 7440-66-6  |           |
|           |               | Iron (Fe)  | 0.007        | 0.001%        | 7439-89-6  |           |
|           |               | Phosphorus (P)                                   | 1.117        | 0.106%        | 7723-14-0  |           |
|           |               | Tin (Sn)   | 0.171        | 0.016%        | 7440-31-5  |           |
| IC        | IC            | Aluminum (Al)                                    | 0.001        | 0.000%        | 7429-90-5  |           |
|           |               | Titanium (Ti)                                    | 0.000        | 0.000%        | 7440-32-6  |           |
|           |               | Silicon (Si)                                     | 0.338        | 0.032%        | 7440-21-3  |           |
|           | Gold          | Gold (Au)  | 0.101        | 0.010%        | 7440-57-5  |           |
|           | Adhesive      |  | Silver (Ag)  | 0.000         | 0.000%     | 7440-22-4 |
| Epoxy     |               |  | 0.000        | 0.000%        |            |           |
| Capacitor | Body          | Nickel (Ni)                                      | 0.010        | 0.001%        | 7440-02-0  |           |
|           |               | BaTiO <sub>3</sub>                               | 0.816        | 0.078%        | 12047-27-7 |           |
|           | Termination   | Nickel (Ni)                                      | 0.013        | 0.001%        | 7440-02-0  |           |
|           |               | Tin (Sn)   | 0.019        | 0.002%        | 7440-31-5  |           |
|           |               | Copper (Cu)                                      | 0.025        | 0.002%        | 7440-50-8  |           |
| Crystal   | Crystal       | Silicon Dioxide (SiO <sub>2</sub> )              | 0.307        | 0.029%        | 14808-60-7 |           |

|                         |                            |   |                 |                 |            |
|-------------------------|----------------------------|---|-----------------|-----------------|------------|
|                         | Electrode                  | Silver (Ag)   | 0.006           | 0.001%          | 7440-22-4  |
|                         |                            | Nickel (Ni)   | 0.000           | 0.000%          | 7440-02-0  |
|                         | Adhesive                   | Silver (Ag)   | 0.000           | 0.000%          | 7440-22-4  |
|                         |                            | Silicon (Si)  | 0.000           | 0.000%          | 7440-21-3  |
| <b>Plastic</b>          |                            | Silicon Dioxide (SiO2)  | 663.073         | 63.150%         | 14464-46-1 |
|                         |                            | Epoxy Resin   | 128.381         | 12.227%         |            |
|                         |                            | Aldehyde Resin  | 105.039         | 10.004%         |            |
|                         |                            | Bromine (Br)  | 11.670          | 1.111%          | 7726-95-6  |
|                         |                            | Antimony Trioxide (Sb2O3)   | 11.670          | 1.111%          | 1309-64-4  |
| <b>Circuit Board</b>    | FR-4                       | Phenol, 4,4'-(1-methylethylidene)bis(2,6-dibromo-,polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis(phenol) | 20.081          | 1.913%          | 26265-08-7 |
|                         |                            | Copper (Cu)   | 10.953          | 1.043%          | 7440-50-8  |
|                         |                            | GF-Fibre  | 29.818          | 2.840%          |            |
|                         | Copper Anode               | Copper (Cu)   | 1.017           | 0.097%          | 7440-50-8  |
|                         | Soldermask                 | Bisphenol A, epichlorohydrin polymer  | 0.169           | 0.016%          | 25068-38-6 |
|                         |                            | (2-Methoxymethylethoxy)propanol   | 0.042           | 0.004%          | 34590-94-8 |
|                         |                            | Barium sulphate   | 0.148           | 0.014%          | 7727-43-7  |
|                         |                            | 2-Methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one  | 0.042           | 0.004%          | 71868-10-5 |
|                         |                            | Dipropylene glycol ethyl ether  | 0.021           | 0.002%          | 15764-24-6 |
|                         | ENIG                       | Nickel bis(sulphamidate)  | 0.137           | 0.013%          | 13770-89-3 |
|                         | Gold (Au)                  | 0.004   | 0.000%          | 7440-57-5       |            |
| <b>High Temperature</b> | <b>RoHS exemption 7(a)</b> | Lead (Pb)   | 1.906           | 0.182%          | 7439-92-1  |
|                         |                            | Tin (Sn)  | 0.212           | 0.020%          | 7440-31-5  |
| <b>Total</b>            |                            |   | <b>1050.000</b> | <b>100.000%</b> |            |



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