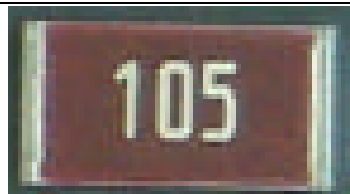


# MATERIAL DECLARATION SHEET

**BOURNS®**

|                 |                                                              |     |     |                                                                                     |
|-----------------|--------------------------------------------------------------|-----|-----|-------------------------------------------------------------------------------------|
| Material Number | CHV1206 Series                                               |     |     |  |
| Product Line    | Safety Certified Thick-Film Type High-Voltage Chip Resistors |     |     |                                                                                     |
| Compliance Date | 09/01/2016                                                   |     |     |                                                                                     |
| RoHS Compliant  | Yes                                                          | MSL | N/A |                                                                                     |

| No. | Construction Element(subpart) | Homogeneous Material | Material weight [mg] | Homogeneous Material\ Substances | CASRN<br>if applicable | Materials Mass % | Material Mass % of total unit wt. | Subpart mass of total wt. (%) |
|-----|-------------------------------|----------------------|----------------------|----------------------------------|------------------------|------------------|-----------------------------------|-------------------------------|
| 1   | Ceramic                       | Substrate            | 8.588                | Aluminum oxide                   | 1344-28-1              | 96               | 81.946                            | 85.36                         |
|     |                               |                      |                      | Silicon dioxide                  | 14808-60-7             | 2                | 1.707                             |                               |
|     |                               |                      |                      | Magnesium oxide                  | 1309-48-4              | 2                | 1.707                             |                               |
| 2   | Top conductor                 | Silver               | 0.162                | Silver                           | 7440-22-4              | 100              | 1.61                              | 1.61                          |
| 3   | Bottom conductor              | Silver               | 0.0543               | Silver                           | 7440-22-4              | 100              | 0.54                              | 0.54                          |
| 4   | Resistor                      | Ruthenium Oxide      | 0.1087               | Glass                            | 65997-18-4             | 55.7             | 0.602                             | 1.08                          |
|     |                               |                      |                      | Lead                             | 7439-92-1              | 19.3             | 0.208                             |                               |
|     |                               |                      |                      | Ruthenium(IV) oxide              | 12036-10-1             | 25               | 0.27                              |                               |
| 5   | First encapsulating           | Glass                | 0.1038               | Glass                            | 65997-18-4             | 92               | 0.949                             | 1.032                         |
|     |                               |                      |                      | Chromium(III) oxide              | 1308-38-9              | 8                | 0.083                             |                               |
| 6   | Overcoat                      | Resin                | 0.2327               | Resin                            | 25036-25-3             | 100              | 2.313                             | 2.313                         |
| 7   | Side conductor                | Silver               | 0.2341               | Silver                           | 7440-22-4              | 85               | 1.978                             | 2.327                         |
|     |                               |                      |                      | Resin                            | 9003-36-5              | 15               | 0.349                             |                               |
| 8   | Plating (Middle)              | Nickel               | 0.1985               | Nickel                           | 7440-02-0              | 100              | 1.973                             | 1.973                         |
| 9   | Plating (Outer)               | Tin                  | 0.3573               | Tin                              | 7440-31-5              | 100              | 3.551                             | 3.551                         |
| 10  | Marking                       | Resin                | 0.0215               | Resin                            | 29690-82-2             | 70               | 0.15                              | 0.214                         |
|     |                               |                      |                      | Pigment                          | 1317-80-2              | 30               | 0.064                             |                               |
|     |                               | Total weight         | 10.0609              |                                  |                        |                  |                                   |                               |

**This Document was updated on: 09/01/2016**

## Important remarks:

1. It is the responsibility of the user to verify they are accessing the latest version.
2. RoHS exemption: 7(c)-1 Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in Capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound.