


MATERIAL DECLARATION SHEET



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|-----------------|--|-----|-----|---|
| Material Number | CRS0805 Series | | |  |
| Product Line | High power & anti-surge 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 if applicable | Materials Mass % | Material Mass % of total unit wt. | Subpart mass of total wt. (%) |
|--------------|-------------------------------|----------------------|----------------------|----------------------------------|---------------------|------------------|-----------------------------------|-------------------------------|
| 1 | Ceramic | Substrate | 4.112 | Aluminium oxide | 1344-28-1 | 96 | 81.075 | 84.453 |
| | | | | Silicon dioxide | 14808-60-7 | 2 | 1.689 | |
| | | | | Magnesium Oxide | 1309-48-4 | 2 | 1.689 | |
| 2 | Top conductor | Silver | 0.0817 | Silver | 7440-22-4 | 100 | 1.678 | 1.678 |
| 3 | Bottom conductor | Silver | 0.0482 | Silver | 7440-22-4 | 100 | 0.990 | 0.99 |
| 4 | Resistor | Ruthenium Oxide | 0.049 | Silver | 7440-22-4 | 40 | 0.402 | 1.006 |
| | | | | Ruthenium(IV) oxide | 12036-10-1 | 20 | 0.201 | |
| | | | | Palladium | 7440-05-3 | 15 | 0.151 | |
| | | | | Glass | 65997-17-3 | 14.9 | 0.150 | |
| | | | | Lead | 7439-92-1 | 10.1 | 0.102 | |
| 5 | First encapsulating | Glass | 0.0467 | Glass | 65997-18-4 | 92 | 0.882 | 0.959 |
| | | | | Chromium(III) oxide | 1308-38-9 | 8 | 0.077 | |
| 6 | Overcoat | Resin | 0.1172 | Resin | 25036-25-3 | 100 | 2.407 | 2.407 |
| 7 | Side conductor | Silver | 0.1707 | Silver | 7440-22-4 | 85 | 2.98 | 3.506 |
| | | | | Resin | 9003-36-5 | 15 | 0.526 | |
| 8 | Plating (Middle) | Nickel | 0.0925 | Nickel | 7440-02-0 | 100 | 1.9 | 1.900 |
| 9 | Plating (Outer) | Tin | 0.1388 | Tin | 7440-31-5 | 100 | 2.851 | 2.851 |
| 10 | Marking | Resin | 0.0122 | Resin | 29690-82-2 | 70 | 0.175 | 0.250 |
| | | | | Titanium(IV) oxide | 1317-80-2 | 30 | 0.075 | |
| Total weight | | | 4.869 | | | | | |

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

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Capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound.