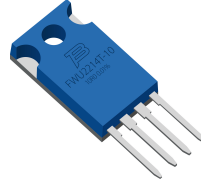


# MATERIAL DECLARATION SHEET



|                 |                 |     |   |                                                                                     |
|-----------------|-----------------|-----|---|-------------------------------------------------------------------------------------|
| Material Number | FWU Series      |     |   |  |
| Product Line    | Fixed Resistors |     |   |                                                                                     |
| Compliance Date | 2025/7/29       |     |   |                                                                                     |
| RoHS Compliant  | No              | MSL | 1 |                                                                                     |

Reference part number: FWU2202T

| 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   | Lead Plating                  | Tin Plating          | 2.64                 | Tin                              | 7440-31-5           | 90.9             | 0.115                             | 0.127                         |
|     |                               |                      |                      | Copper                           | 7440-50-8           | 7.6              | 0.01                              |                               |
|     |                               |                      |                      | Silver                           | 7440-22-4           | 1.5              | 0.002                             |                               |
| 2   | Leads                         | Copper               | 150                  | Copper                           | 7440-50-8           | 100              | 7.167                             | 7.167                         |
| 3   | Inside Soldering              | Tin Plating          | 5.28                 | Tin                              | 7440-31-5           | 90.9             | 0.229                             | 0.252                         |
|     |                               |                      |                      | Lead                             | 7439-92-1           | 7.6              | 0.019                             |                               |
|     |                               |                      |                      | Silver                           | 7440-22-4           | 1.5              | 0.004                             |                               |
| 4   | Heatsink                      | Copper Plate         | 1350                 | Copper                           | 7440-50-8           | 100              | 64.5                              | 64.5                          |
| 5   | Heatsink Plating              | Nickel Plating       | 1                    | Nickel                           | 7440-02-0           | 100              | 0.048                             | 0.048                         |
| 6   | Substrate                     | Ceramic              | 115.68               | Alumina                          | 1344-28-1           | 99.59            | 5.504                             | 5.527                         |

# MATERIAL DECLARATION SHEET



|    |                   |                |              |                    |            |      |        |        |
|----|-------------------|----------------|--------------|--------------------|------------|------|--------|--------|
|    |                   |                |              | Silicon Dioxide    | 7631-86-9  | 0.41 | 0.023  |        |
| 7  | Foildbond         | Epoxy          | 2.1          | Epoxy              | 68928-70-1 | 100  | 0.1    | 0.1    |
| 8  | Resistor Material | Metal Foil     | 24.31        | Copper             | 7440-50-8  | 2.5  | 0.029  | 1.161  |
|    |                   |                |              | Nickel             | 7440-02-0  | 75   | 0.871  |        |
|    |                   |                |              | Chromium           | 7440-47-3  | 20   | 0.232  |        |
|    |                   |                |              | Aluminum           | 7429-90-5  | 2.5  | 0.029  |        |
| 9  | Chipbond          | Filled Epoxy   | 40           | Epoxy              | 68928-70-1 | 100  | 1.911  | 1.911  |
| 10 | Cover             | Silicone Based | 2            | Silicon            | 7440-21-3  | 100  | 0.096  | 0.096  |
| 11 | Mold              | Epoxy          | 400          | Polyphenylensulfid | 26125-40-6 | 100  | 19.111 | 19.111 |
|    |                   |                | Total weight | 2093.01            |            |      |        |        |

This Document was updated on: 2025/7/29

## Important remarks:

1. It is the responsibility of the user to verify they are accessing the latest version.
2. Resistive material weight will be different based on the resistance value.

# MATERIAL DECLARATION SHEET

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3. The weight of the core and coating material will differ based on the size