

# MATERIAL DATA SHEET



SMD Diodes Specialist

|              |                |                                                                                     |
|--------------|----------------|-------------------------------------------------------------------------------------|
| Material #   | SOT-323 Series |  |
| Product Line | SOT-323        |                                                                                     |
| Date         | 2009/6/18      |                                                                                     |
| Rev. date    | C              |                                                                                     |

## COMPONENT DETILS

| No.          | Construction element | Material group | Material weight (mg) | Material       | CAS if applicable | Average mass (%) | Sum(%) | Traces |
|--------------|----------------------|----------------|----------------------|----------------|-------------------|------------------|--------|--------|
| 1            | Lead Frame           | SDI            | 1.85                 | Nickel         | 7440-02-0         | 41.00%           | 33.46% |        |
|              |                      |                |                      | Manganese      | 7439-96-5         | 0.70%            |        |        |
|              |                      |                |                      | Cobalt         | 7740-48-4         | 0.40%            |        |        |
|              |                      |                |                      | Silicon        | 7440-21-3         | 0.20%            |        |        |
|              |                      |                |                      | Chromium       | 7440-47-3         | 0.05%            |        |        |
|              |                      |                |                      | Copper         | 7440-50-8         | 0.05%            |        |        |
|              |                      |                |                      | Carbon         | 7740-44-0         | 0.01%            |        |        |
|              |                      |                |                      | Iron           | 7439-89-6         | 56.59%           |        |        |
|              |                      |                |                      | Silver         | 7740-22-4         | 1.00%            |        |        |
| 2            | Wire                 | Heraeus        | 0.019                | Aurum          | 7440-57-5         | 100.00%          | 0.34%  |        |
| 3            | Mold Compound        | HuaWei         | 3.32                 | Silica Fused   | 60676-86-0        | 83.00%           | 60.05% |        |
|              |                      |                |                      | Epoxy resin    | 29690-82-2        | 10.00%           |        |        |
|              |                      |                |                      | Phenolic Resin | 9003-35-4         | 6.50%            |        |        |
|              |                      |                |                      | Carbon Black   | 1333-86-4         | 0.50%            |        |        |
| 4            | Wafer                | YanDong        | 0.200                | Silicon        | 7440-21-3         | 95.50%           | 3.62%  |        |
|              |                      |                |                      | Gold           | 7440-57-5         | 3.50%            |        |        |
|              |                      |                |                      | Aluminum       | 7429-90-5         | 1.00%            |        |        |
| 5            | Plating              | YSTIN          | 0.14                 | Tin            | 7440-31-5         | 100.00%          | 2.53%  |        |
| Total weight |                      |                | 5.529                |                |                   |                  |        |        |