

Residual Resistivity and Defects

Shown here are measured curves of the low temperature resistivity of **Na** with different defect concentrations

- The resistivity is constant for very small temperatures.
- In the "bend" it shows T^5 characteristics.
- For most of the temperature range it is proportional to T .

Illustration

Defects clearly do increase the residual resistance (the upper two curves are for **Na** with defects, the lower one for rather perfect **Na**); the effect can be much large in other metals or for larger defect densities.

