Copper C101

Copper C101, also known as Oxygen-Free Electronic (OFE) copper, is a high-purity copper alloy with extremely low oxygen content. It offers excellent electrical and thermal conductivity, making it ideal for electronic and electrical applications. C101 is commonly used in electrical connectors, power transmission, printed circuit boards, and semiconductor manufacturing due to its high conductivity and resistance to corrosion.

Chemical Composition

Element	Maximum Unless Range is Specified
Cu %	Bal
Pb %	.005
Bi %	.0005
O %	.040
Others	.03

Physical Properties

Property	Maximum Unless Range is Specified
Density g/cm3	8.92
Thermal Expansion,10-6/K	16.9
Electrical Resistivity,microhm m	0.0171
Electrical Conductivity,W/m˚K	391.1
Melting Point (Deg ˚C)	1083
Modules of Elasticity, GPa	117

Mechanical Properties

Property	Minimum Unless Range is Specified
Tensile Strength,MPa	250
Proof Stress 0.2%, MPa	180
Tensile Yield Strength ksi	30-50
Elongation A5	15%
Hardness, as per H065: Brinell	65-90
Hardness, as per H065: Vickers	70-95

The material properties in this datasheet are provided by one of the manufacturers collaborating with Naxtry. Please note that material properties may slightly vary among different manufacturers. Naxtry can accommodate customer requests for specific materials or brands.