

PROPERTIES OF COPPER

Electical Conductivity	101% IACS‡ at 68°F (20°C)
Electrical Resistivity	10.3 ohms (mil. ft.) at 68°F (20°C)
Density	0.322 lbs/in ³
Melting Point	1981°F
Thermal Conductivity	226 Btu/ft ² /ft/hr/°F at 68°F (20°C)
Linear Coefficient of Thermal Expansion	0.0000098 per °F (average from 68°F to 600°F)
Tensile Strength- Hard	55,000 lbs/in ²
Tensile Strength- Soft	32,000 lbs/in ²
*Yield Strength-Hard	50,000 lbs/in ²
*Yield Strength-Soft	10,000 lbs/in ²
Elongation-Hard	6% in 2 in.
Elongation-Soft	55% in 2 in.
Rockwell Hardness-Hard	B60
Rockwell Hardness-Soft	F40
Modulus of elasticity	17,000,000 lbs/in ²

**Yield strength is assumed to be that stress which causes 0.5% extension.*

‡ By IACS is meant the "International Annealed Copper Standard" which is the internationally accepted value annealed copper of 100% conductivity. The Value is 10.371 ohms per mil foot or 20°C and was adopted by the Technical Committee in 1913.

*for the resistivity or
the International Electro-*