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Silver, Ag Material Notes

Component	Wt. %			
Ag	100			
Physical Properties		Metric	English	Comments
Density		10.491 g/cc	0.379 lb/in ³	
Mechanical Properties				
Hardness, Vickers		25	25	Annealed
Tensile Strength, Ultimate		140 MPa	20300 psi	Annealed
Modulus of Elasticity		76 GPa	11000 ksi	
Poisson's Ratio		0.37	0.37	Annealed
Poisson's Ratio		0.39	0.39	Hard drawn
Shear Modulus		27.8 GPa	4030 ksi	Calculated; Annealed
Electrical Properties				
Electrical Resistivity		1.55e-006 ohm-cm	1.55e-006 ohm-cm	
Magnetic Susceptibility		2e-007	2e-007	cgs/g
Thermal Properties				
Heat of Fusion		105 J/g	45.2 BTU/lb	
CTE, linear 20°C		19.6 µm/m-°C	10.9 µin/in-°F	over the range 20-100°C
CTE, linear 250°C		19.9 µm/m-°C	11.1 µin/in-°F	over the range 0-250°C
CTE, linear 500°C		20.6 µm/m-°C	11.4 µin/in-°F	over the range 0-500°C
CTE, linear 1000°C		22.4 µm/m-°C	12.4 µin/in-°F	over the range 0-900°C
Specific Heat Capacity		0.234 J/g-°C	0.0559 BTU/lb-°F	
Thermal Conductivity		419 W/m-K	2910 BTU-in/hr-ft ² -°F	
Melting Point		961.93 °C	1760 °F	
Optical Properties				
Emissivity (0-1)		0.055	0.055	700°C
Reflection Coefficient, Visible (0-1)		0.9	0.9	