Version 1.2
January 3, 2010
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Coefficients of Thermal Expansion

Material	CTE (ppm/deg-C)	Temperature Range	Comment
Borofloat33	3.25		
Schott B270	9.4-9.8		
Schott G018-223 frit	3.0-3.14		360C soft
AGC 5290 MEMS frit	7.9		405C soft
Aluminum	23.6		
Silver	19.5		
Copper	16.6		
Gold	14.2		
Nickel	13.8		
Platinum	8.9		
Titanium	8.4		
Chromium	6.2		
Nichrome80/20	17.4		
Inconel	11.5-12.6		
Kovar	4.9-5.5		

Table 1: Coefficients of Thermal Expansion in parts-per-million per degree Centigrade. There is some variation in quoted numbers, possibly due to averaging over different temperature ranges.

Electrical Conductivity

Material	Electrical Conductivity $10^6/\Omega$-cm	Frequency Range	Comment
Silver	0.63		
Copper	0.60		
Gold	0.45		
Aluminum	0.38		
Nickel	0.14		
Platinum	0.10		
Chromium	0.08		
Titanium	0.02		
Nichrome80/20	0.002		
Inconel	0.01		
Kovar	0.02		

Table 2: Electrical conductivity of materials for in units of $10^6/\Omega$-cm. Note: to get resistance, take 1 over the conductance: eg. for gold the resistance is $\sim$ 22 nano-Ohm-meters. One Ohm-m is the inverse of 1 Siemens (watch out for cm and m).