Kovar Alloy Properties

(ASTM F-15, NILO K, Pernifer 2918, Rodar, and Dilvar P1)

Kovar Alloy Physical Properties		
Density	lb/cu in	0.302
Specific Gravity		8.36
Curie Temp	°F	815
	°C	435
Melting Point	°F	2640
	°C	1449
Electrical Resistivity	Micro-ohm-cm	40
	Micro-ohm-cm	294
Thermal Conductivity	W/cm °C	0.17
	BTU-in/sq. ft-hr-	120
Specific Heat	Cal/g- °C	0.11
	BTU/lbm- °F	0.11
Thermal Expansion	ppm/°F (75°F to 842°F)	2.9
	ppm/°C (25°C to 450°F)	5.3

Kovar Alloy Mechanical Properties		
Tensile Strength	ksi	75
	MPa	518
Yield Strength	ksi	40
	MPa	276
Elongation	% in 2 in.	30
Typical Hardness Ann.	Rockwell	HRB 80
Modulus of Elasticity	Mpsi	30
	kMPa	207

Kovar Alloy Chemistry	
maximum % unless noted	
Iron	Bal
Nominal Nickel	29
Nominal Cobalt	17
Carbon	0.02
Silicon	0.20
Sulfur	--
Chromium	0.20

Kovar Alloy Linear Coefficient of Thermal Expansion			
Degree C		**Degree C**	
30-100	--	30-450	5.1 - 5.5
30-150	--	30-475	--
30-200	5.5	30-500	6.2
30-250	--	30-525	--
30-300	5.1	30-550	--
30-325	--	30-600	7.9
30-350	--	30-700	9.3
30-375	--	30-800	10.4
30-400	4.6 - 5.2	30-900	11.5
30-425	--	30-1000	--

Kovar is available online at:
http://www.professionalplastics.com/KOVAR

Call Professional Plastics at (888) 995-7767
E-Mail: sales@proplas.com
Order Online at www.professionalplastics.com

Asia Customers Call + 65-6266-6193 - E-Mail: asia-sales@proplas.com