42%Ni-Fe

Lead frame materials

Characteristics

•High dimension accuracy and flatness Formability in high-speed stamping ,photo etching and stability after forming.
•Good surface cleanness and surface uniformity.Excellent surface processability and adhesiveness of oxide film for high-speed plating.
•High hardness and transform resistance.
•Much closeness to coefficient of linear expansion of Si, so it is adequate to use 42%Ni-Fe in molding process.
•Precice composition control ensures the stability of product characteristics.
•Referential standards:ASTM F-30(UNS K94100)

Chemical composition(wt%)

Ni	Fe
41	Bal.

Mechanical properties

Temper	T/S (N/mm²)	Elongation (%)	Hardness (HV)
A	~590	≧30	120~160
1/2H	590~735	≧3	180~220

Physical properties

Density(20℃)	g/cm³	8.15
Modulus of elasticity	GPa	145
Electrical resistivity	μΩ•m	0.55
Thermal conductivity	W/(m•K)	14.7
Coefficient of linear expansion(900℃ x 1hr)	X10⁻⁶/℃	4.2(30-300℃)
Curie point	℃	375
Melting point	℃	1425