C19025

TRIANGL EALLOY©

DATA SHEET

Fabricated Metal Products

Alloy Designation	
EN	CuNi1Sn1P
DIN	CuNi1Sn1P
UNS	C19025 ASTM B422
JIS	NB109***

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Characteristics

C19025 delivers a balanced combination of relatively high strength and good electrical conductivity of approximately 40 percent IACS. It offers excellent mechanical properties, superior stress relaxation resistance and very good bending workability, together with good corrosion resistance, making it well suited for miniaturized, lightweight and cost effective electrical and electronic components.

Chemical Composition		
Sn	0.7-1.1	**%**
Ni	0.8-1.2	**%**
P	0.03-0.07	**%**
Cu	Remainder	

Main Applications
Battery connector | Busbar
Automobile Connectors | Switch parts
The terminal member | semiconductor carriers
Electrical and electronic connectors

Physical Properties (Reference values at room temperature)

Density	g/cm^3	8.9
Electrical conductivility	IACS%(20°C)*	40
Modulus of elasticity	KN/mm^2	130
Coefficient of thermal expansion	$10^{-6}/K$	17.1
Thermal conductivity	W/(m*K)	161

***value for the lowest temper class**

Mechanical Properties

TEMPER		Tensile Strength Mpa	Yield Strength Mpa	Elongation %	Hardness HV	Bending Test(90°) GW	Bending Test(90°) BW
HR01	1/4H	325 - 470	min. 290	min. 15	120 - 155	0	0
HR02	1/2H	435 - 525	min. 400	min. 7	135- 170	0	0
HR04	H	495 - 570	min. 470	min. 5	155- 180	0	0
HR06	EH	540 - 615	min. 510	min. 4	160- 200	0.5	1

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