

Product Information

Solid wire FELDER-ISO-Tin® “Sn100Ni+”

Lead-free solder wire for selective soldering units

FELDER-ISO-Tin® „Sn100Ni+“

Sn99,25Cu0,7Ni0,05Ge according EN ISO 9453

Item No.: 5514940..

All information about our products is the result of our long standing experience which we would like to pass on to our customers as application support. However, as we do not have any influence on the application of the works carried out with our products, please see the warranty claims in our conditions of sale because our liability is limited.

This product information does not constitute warranted properties.

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Application

Lead-free soldering in selective soldering units with automatic solder level regulation.

Properties

Beside the well-known advantages of Ni-endowed solders our alloy reaches by the adding of Germanium improved wetting qualities on all common surfaces in the electronic industry and lowest dross formation in comparison to all other lead-free solders.

Alloy	SN100Ni+ (Sn99,3CuNiGe)	Sn99,3Cu0,7
Melting temperature in °C	227 eutectic	227 eutectic
Density in g/cm ³	7,31	7,31
Tensile strength in N/mm ²	40	37,4
Extension in %	70	66
Hardness Hv	11,5	11
Creep strength at 80° C and 1200 g in hr	> 3000	>3000
Spreading rate according to JIS Z3283 in %	73,6	72,8
Wetting time in sec.	0,88	0,91
Max. wettability in mN	1,07	1,04
Electrical conductivity in Ωm	2,5 x 10 ⁻⁷	2,0 x 10 ⁻⁷
Thermal expansion factor in 1/°C	23,6 x 10 ⁻⁶	21,5 x 10 ⁻⁶

Benchmarks / Limits

element content (%)	Sn	Cu	Ag	Ni	Ge	Pb
Rest	0.5 - 0.7	max.0.03	0.05 – 0.07	0.010 – 0.015	max. 0.05	

element content (%)	Al	As	Bi	Cd	Fe	Sb	Zn
max. 0.001	max. 0.03	max. 0.05	max. 0.002	max. 0.02	max. 0.05	max. 0.001	

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Delivery Forms

Wire diameter: 0,5 - 5,0 mm Ø (other wire diameters are deliverable on request)

Standard spool sizes: 0,05 - 15,0 kg (special spools are deliverable on request)

Advices

Lead-free FELDER ISO-Tin® electronic solders do not contain any substances for which there are restrictions in Directive 2011/65/EU (RoHS II).

Other alloys are included in our standard delivery program.

Storage

Stored at constant room temperature infinitely durable.