FELDER seit 1979 LÖTTECHNIK

Product information

FELDER-ISO-Core® "EL" – Pb93Sn5Ag2

Flux-cored, halide free activated soft solder wire,
Flux according to EN ISO 9454-1:2016,1131 respectively DIN EN 61190-1-1 / J-STD-004, ROL0

Art.-Nr.: 2006.....

The solder Pb93Sn5Ag2 is subject to the exemption in point 7a of appendix III in directive 2011/65/EU (RoHS II): "Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)."

Description

Low residue, halide free, no-clean solder wire, especially adapted to the requirements in the electronic production. The flux characterises itself by its high temperature constancy and does not spatter during the reflow soldering. The bright, solid flux residues are neither corrosive nor electrical conductive and may therefore remain on the soldering joint.
In combination with the alloy Pb93Sn5Ag2 this solder wire is appropriated for application in the high-temperature sector for continuous temperatures up to 200° C.
The flux residues do not evoke corrosion at non-ferrous metals and show highest surface resistance values. Therefore, they may remain on the soldering joint. However, if cleaning is desired, it can be performed with any common cleaning agents.

Properties

Alloy	:	93 % Pb, 5 % Sn, 2 % Ag
Melting Range	:	296 – 310 °C
Density (alloy)	:	11.0 g/ccm
Flux type	:	1131 (based on rosin, halide free)
Flux content	:	1.8 - 2.0 % by weight
Number of flux cores	:	1
Halide content	:	< 0.1 %

The flux content of 1.8 - 2.0 % by weight corresponds, in volume equivalent, to a flux content of 3.2 - 3.5 % by weight for the lead-free RA variants and is optimally matched to solder alloys with a high content of lead:

Flux content	ISO-Core® "EL" lead-free	ISO-Core® "EL" Pb93Sn5Ag2
in % by weight	3.2 - 3.5	1.8 - 2.0
in vol.-%	21	20

Surface insulation resistance (SIR) according to IPC-TM-650

after 24 h*	:	5,8E+11 Ω
after 96 h*	:	1,8E+11 Ω
after 504 h*	:	9,8E+10 Ω
Reference sample (24 h*)	:	9,8E+11 Ω

*Storage of sample-pcbs at conditioned atmosphere 40°C/ 93% rel. humidity.
Measuring voltage = 5V DC

 State:11/25

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Electrolytic corrosion

After storage for 504 hours (h) of tested PC-board from the SIR-test at testing climate 40°C/ 93% rel. humidity with 5V persistently set-up DC voltage.

after 504 h : no electrolytic corrosion

Storage advice and shelf live

At constant room temperature, dry and properly stored, shelf life is at least 10 years.

Advices for handling

Please refer to the corresponding MSDS (Material Safety Data Sheet).

Delivery forms

Ø in mm	:	1.00, 1.50, 2.00, 3.00, 4.00
Spool size in kg	:	0.25, 0.50, 1.00

We are delighted to produce all solder wires according to your company standards.

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