kester®

Technical Data Sheet

48 Flux-Cored Wire

Activated Rosin Cored Wire for Lead-free and Leaded Alloys

Product Description

Kester 48 Activated Rosin Flux for cored solder wire was developed for lead-free applications to enable soldering of most common metals. 48 has performance characteristics far exceeding standard RA fluxes. 48 builds on the performance of its predecessor Kester 44 with “instant-action” wetting to provide fast and reliable solder joints.

Performance Characteristics:

- Unparalleled wetting performance
- Excellent solderability and fast wetting to a variety of surface finishes
- Eliminates the need and expense of cleaning
- Low spattering
- Low smoke and odor
- Classified as ROM1 per J-STD-004

RoHS Compliance

Kester does not determine any applicable Restriction of Hazardous Substances (RoHS) exemptions for our lead containing products at the user level. (Applies only if this core flux is combined with a lead-free alloy)

Reliability Properties

Copper Mirror Corrosion: Low
Tested to J-STD-004, IPC-TM-650, Method 2.3.32

Corrosion Test: Low
Tested to J-STD-004, IPC-TM-650, Method 2.6.15

Silver Chromate: Fail
Tested to J-STD-004, IPC-TM-650, Method 2.3.33

Fluorides by Spot Test: Pass
Tested to J-STD-004, IPC-TM-650, Method 2.3.35.1

Chloride and Bromides: 1.05%
Tested to J-STD-004, IPC-TM-650, Method 2.3.35

Surface Insulation Resistance (SIR): Pass
Tested to J-STD-004B, IPC-TM-650, Method 2.6.3.7

Surface Insulation Resistance (SIR), (typical): Pass
Tested to J-STD-004, IPC-TM-650, Method 2.6.3.3

	Blank	48
Day 1	$1.6*10^{10}$ Ω	$1.1*10^{10}$ Ω
Day 4	$1.2*10^{10}$ Ω	$9.2*10^{9}$ Ω
Day 7	$1.1*10^{10}$ Ω	$8.6*10^{9}$ Ω

Spread Test (typical):
Tested to J-STD-004, IPC-TM-650, Method 2.4.46

	Area of Spread mm² (in²)	
Flux Core Solder	Sn96.5Ag3.0Cu0.5	Sn63Pb37
285	213 (0.33)	335 (0.52)
275	219 (0.34)	361 (0.56)
44	220 (0.34)	342 (0.53)
48	245 (0.38)	419 (0.65)

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Availability

48 flux cored wire is available in a wide variety of alloys, wire diameters and flux percentages and roll sizes. The most common alloys are Sn96.5Ag3.0Cu0.5 and K100LD. Please refer to www.kester.com for more information.

Note: Core Size 50, 58 and 66 = 1.1, 2.2 and 3.3% flux core

Process Considerations

Solder iron tip temperatures are most commonly between 371-400°C (700-750°F) for lead-free alloys. Heat both the land area and component lead to be soldered with the iron prior to apply the solder wire to the land area or component lead. Do not apply the wire directly to the soldering iron tip; doing so will shorten the life of the soldering tip.

Additional liquid flux should only be used as a last resort. Any flux applied to the solder location should be kept to the area of the connection being reworked. If needed, Kester 186 or Kester NF372-TB may be used as a compatible liquid fluxes to aid in reworking soldered joints. Kester 186 and Kester NF372-TB are also available in Flux-Pens® for optimum board cleanliness.

Cleaning

48 possesses excellent fluxing ability, the flux residue is non-corrosive and non-conductive and do not require removal for most applications under normal conditions of use. IPA will not clean the residues off the surface of the circuit board after the soldering process. A saponifier or cleaning agent specifically designed to clean a rosin based flux is required to clean the residues. Please contact Kester Technical Support for further information.

Storage and Warranty Period

Storage must be in a dry, non-corrosive environment between 10-40°C (50-104°F). The surface may lose its shine and appear a dull shade of grey. This is a surface phenomenon and is not detrimental to product functionality. Flux-cored solder wire has a limited warranty period determined by the alloy used in the wire. For alloys containing more than 70% lead, the warranty period is 2 years from the date of manufacture. Other alloys have a warranty period of 3 years from the date of manufacture.

Health and Safety

This product, during handling or use, may be hazardous to your health or the environment. Read the Safety Data Sheet (SDS) and warning label before using this product.

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Данный компонент на территории Российской Федерации

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http://moschip.ru/get-element

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В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

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