

TSF-6502 JCR No-Clean Tacky Soldering Flux



Product Description

Kester TSF-6502 JCR is a no-clean tacky soldering flux formula that possesses a high activity level, allowing it to solder nickel surfaces. The robust wetting action of TSF-6502 JCR will allow OSP treated copper, as well as heavily oxidized copper, surfaces to exhibit good soldering properties, even after 2 or 3 thermal cycles. Following reflow, TSF-6502 JCR will leave aesthetically pleasing clear residues on the assembly. TSF-6502 JCR is designed for a wide range of temperature and humidity conditions.

Performance Characteristics:

- Stencil life: 8 hours (process dependent)
- Excellent printing characteristics to <16mil pitch
- Leaves bright/shiny solder joints after reflow
- Can reflow in air or nitrogen environments
- Classified as ROL1 per J-STD-004
- Compliant to Bellcore GR-78



RoHS Compliance

This product meets the requirements of the Restriction of Hazardous Substances (RoHS) Directive, 2011/65/EU for the stated banned substances.



Physical Properties

Viscosity Range: 100 poise
Malcom Viscometer @ 10rpm and 25°C

Initial Tackiness (typical): 100 grams
Tested to J-STD-005, IPC-TM-650, Method 2.4.44

Acid Number: 89.0 mg KOH/g of flux
Tested to J-STD-004, IPC-TM-650, Method 2.3.13



Reliability Properties

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

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

SIR, IPC (typical): Pass
Tested to J-STD-004, IPC-TM-650, Method 2.6.3.3, B-24 coupon

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

	Blank	TSF-6502 JCR
Day 1	2.2*10 ¹⁰ Ω	1.6*10 ⁹ Ω
Day 4	1.9*10 ¹⁰ Ω	2.0*10 ⁹ Ω
Day 7	1.4*10 ¹⁰ Ω	2.3*10 ⁹ Ω

✓ Standard Applications

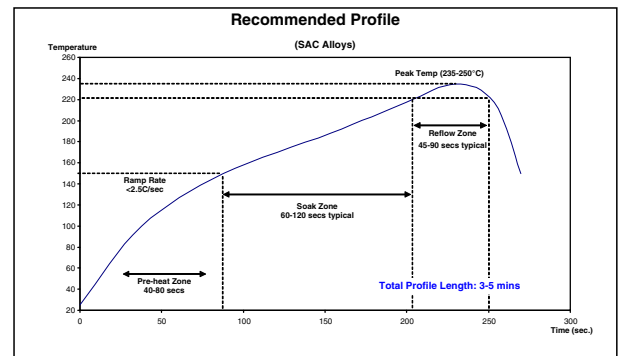
TSF-6502 JCR was designed for stencil/screen printing, pin transfer, dot dispensing and/or syringe applications. This flux can be used as a tack and flux vehicle for soldering components to a solid solder deposit (SSD), or precision pad technology (PPT) board surfaces. TSF-6502 JCR is great for rework applications on all PCB packages. TSF-6502 JCR can be used in BGA/PGA sphere/pin attachment vehicle or for repair and reballing/repinning. This flux works on flip chip, chip scale package and flip chip bumping sites assemblies as a soldering flux.

♻️ Printing Parameters

Temperature/Humidity Optimal ranges are 21-25°C (70-77°F) and 35-65% RH

♻️ Recommended Reflow Profile

Optimal activation temperatures are 150-210°C (302-410°F). See the Soak Zone in diagram below.



• Cleaning

TSF-6502 JCR is a no-clean formula. The residues do not need to be removed for typical applications. If residue removal is required, contact Kester Technical Support.

📦 Storage, Handling and Shelf Life

Refrigeration is the recommended optimum storage condition for TSF-6502 JCR to maintain consistent viscosity, reflow characteristics and overall performance. TSF-6502 JCR should be stabilized at room temperature prior to printing. TSF-6502 JCR should be kept at standard refrigeration conditions, 0-10°C (32-50°F). Please contact Kester if you require additional advice with regard storage and handling of this material. Shelf life is 6 months from date of manufacture when handled properly and held at 0-10°C (32-50°F).

⚠️ Health and Safety

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