RoHS Compliance and Lead-Free Relay Information

1. General Information

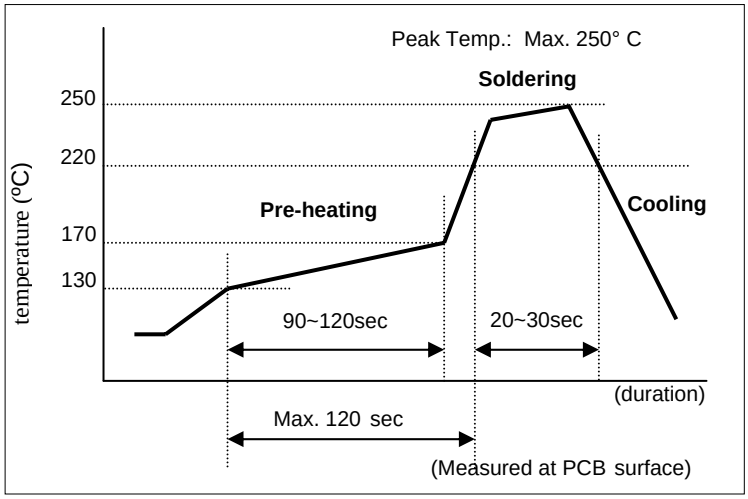
- The relays produced after the specific date code that is indicated on each data sheet are lead-free now. Most of our signal and power relays are lead-free. Please refer to Lead-Free Status Info.
- Lead-free solder paste currently used in relays is Sn-3.0Ag-0.5Cu. From February 2005 forward Sn-3.0 Cu-Ni will be used for FTR-B3 and FTR-B4 series relays.
- Most signal and power relays also comply with RoHS. Relays that are RoHS compliant do not contain the hazardous materials that are restricted by the RoHS directive. Hazardous materials are lead, mercury, chromium VI, PBB, PBDE including pentaBDE and octaBDE (with a concentration level <0.1%).
- It has been verified that using lead-free relays in leaded assembly processes will not cause any problems (compatible).
- "JEDEC STANDARD" and "LF" is marked on each outer and inner carton. (No marking on individual relays. Please refer to Lead Free Label Info).

Note: European Commission decided to exempt the use of cadmium in electrical contacts.

2. Recommended Lead Free Solder Profile

- Recommended solder paste is Sn-3.0Ag-0.5Cu and Sn-3.0 Cu-Ni (only FTR-B3/FTR-B4 from February 2005)

Reflow solder condition for SMT relays



Flow Solder Condition

Pre-heating:	Max.120 °C
Soldering:	Dip within 5 sec. at 260°C solder bath

Solder by soldering iron

Soldering iron temperature: Max. 360°C
Duration: Max. 3 sec.

**** We highly recommend confirmation using your actual solder conditions ****

3. Moisture Sensitivity

Moisture Sensitivity Level standard does not apply to electromechanical relays.

4. Tin Whisker

SnAgCu and SnCuNi solder have a low risk of tin whisker. No considerable length whisker was found by our in-house tests.

5. Solid State Relays

Each lead terminal will be changed from solder plating to Sn plating and Nickel plating. A layer of Nickel plating

Please visit our website http://www.fujitsu.com/us/services/edevices/components/relays/lead-free.html for further test data.