

JOHANSON MANUFACTURING CORPORATION
CERA-TRIM HANDLING AND STORAGE PROCEDURE

1.0 PURPOSE:

The purpose of this document is to provide storage and handling information for Johanson Cera-Trim® Capacitors. Additional information by individual product is available: Contact your Johanson Sales Engineer at (973) 334-2676 or at www.johansonmfg.com.

2.0 REFERENCES:

- 2.1 JMC R339 General Application Notes
- 2.2 JMC E285 Cera-Trim Packaging Kit Specification

3.0 GENERAL:

There are three types of Cera-Trim® capacitors, “UV Curable” Top Sealed, “Tape Dot” Top Sealed and “Un-sealed”. Cera-Trims® with a single numeric digit dash number are “UV Curable” Top Sealed. Cera-Trims® with a double numeric dash number below -10 are “Tape Dot” Top Sealed. All other Cera-Trims® are un-sealed. (By example, 2320-2P is a single numeric dash number and therefore has a “UV Curable” Top Seal. 2320-02 is a double numeric dash number below -10 and therefore has a “Tape Dot” Top Seal.)

4.0 STORAGE

- 4.1 In general, all electronic components are susceptible to degradation due to the effects of improper environmental conditions over long periods of time. For best results, keep Johanson components in their original packaging as long as possible.
- 4.2 “UV Curable” Top Sealed Cera-Trims® capacitors are packed with a 1/6 unit of desiccant and must remain in their original packing as long as possible before soldering. Care should be taken to make sure the re-sealable outer bag is completely sealed after each use.
- 4.3 “Tape Dot” Top Sealed & “Un-sealed” Cera-Trims® should remain in their original packaging to prevent handling damage during shipment.
- 4.4 All Cera-Trims®, with or without Top Seals, should be stored in a temperature and humidity controlled environment.
- 4.5 If “UV Curable” Top Sealed Cera-Trims® need to be re-packed then they must be packed in a re-sealable poly/metal anti-static bag with a fresh 1/6 unit of desiccant.
- 4.6 “UV Curable” Top Sealed Cera-Trims® prior to use, must be dried per the following procedure:
 - 4.6.1 For “UV Curable” Top Sealed units that are not in Tape & Reel packaging: Place units in an oven at 35°C for 8 hours minimum or faster drying may be done at 120°-150°C for 60 to 90 minutes. Re-pack using fresh desiccant packs after drying.
 - 4.6.2 For “UV Curable” Top Sealed units that are in Tape & Reel packaging: Place units in an oven at 35°C for 8 hours minimum. Re-pack using fresh desiccant packs after drying.

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5.0 SOLDERING:

Soldering may be performed by reflow, wave, or hand soldering as desired by the end user. The use of 60-40 solder (SN60-63) is recommended. The use of higher temperature solders is not recommended. Protect unsealed capacitors from flux intrusion

- 5.1 Wave Soldering:
Recommended preheat time is 1-2 minutes. Soldering temperature 220°C (430°F) for 5 seconds maximum.
- 5.2 Reflow Soldering:
Recommended preheat time is 1-2 minutes. Maximum soldering temperature is 260°C (500°F), all for 10 seconds max.

6.0 CLEANING:

Johanson components are compatible with a wide variety of cleaning processes including those that utilize aqueous or semi-aqueous cleaning solutions, alcohol solutions, deionized water and numerous other cleaners. However, due to the large variety of such processes, the customer through cleaning process evaluation in conjunction with Johanson products purchased must determine actual compatibility.

- 6.1 Un-sealed Cera-Trims® should be cleaned in contamination free solution. If rough torque occurs after cleaning, re-clean in fresh solution.
- 6.2 "UV Curable" & "Tape Dot" Top Sealed Cera-Trims® can be cleaned in very aggressive systems. It is possible to clean these sealed trimmers by suspension in vapor or total immersion in liquid ultrasonic systems

7.0 TUNING:

Use Johanson 4192 Tuning Tool for both tuning of Un-sealed Cera-Trims® and penetrating the process seal on "UV Curable" Top Sealed Cera-Trims®. "Tape Dot" Top Sealed Cera-Trim® process seals must be removed before tuning tool adjustment is possible.

8.0 SPLIT LOTS AND REPACKAGING

- 8.1 Bulk packed "UV Curable" Top Sealed Cera-Trims® are packaged in a single layer of 200 pieces in a 3"X5" anti-static re-sealable bag between 2 pieces of 4 1/2" x 3 1/2" x 3/16" blue foam. The zip lock bag is inserted into a 4 5/8" x 3 1/2" x 1/2" anti-static kit box and placed inside a 5" x 8" anti-static re-sealable bag with a 1/6 unit of desiccant to prevent damage to the process seal.
- 8.2 JMC provides a re-packing kit when the 200-piece package needs to be split into smaller groups. The JMC part number for this kit is JK-023-2. Parts must be packaged as described in 8.1 above.
- 8.3 When necessary to subdivide Cera-Trims packaged in Tape & Reel, any units not reeled, shall be removed from the Carrier Tape. Bulk Pack the remaining units as described by this specification.